Paper ID	Session	Day	Time	Subject Area	Paper Title	Author Names
16	M1-TS1	Monday, June 17th, 2023	09:00-11:00	Smart buildings	Smartphone-assisted Prepaid Meter System Using BLE IoT Sensors for Smart Cities	Jinsoo Han (Electronics and Telecommunications Research Institute)*; Wan-Ki Park (Electronics and Telecommunications Research Institute)
54	M1-TS1	Monday, June 17th, 2023	09:00-11:00	Smart buildings	Optimizing Integrated Shading Device and Light Shelf for Daylight Performance and Visual Comfort in Architecture Studio	Pelin Avcı (Izmir Institute of Technology)*; Berk Ekici (Izmir Institute of Technology); Tuğçe Kazanasmaz (Izmir Institute of Technology)
163	M1-TS1	Monday, June 17th, 2023	09:00-11:00	Smart buildings	BIM-Based Digital Twin and Augmented Reality for Electrical Maintenance in Smart Buildings: A Case Study of Torre Regione Piemonte	Michele. Zucco (Politecnico di Torino)*; Lorenzo Rosso (Politecnico di Torino); Matteo Del Giudice (Politecnico di Torino); Paolo Di Leo (Politecnico di Torino);
177	M1-TS1	Monday, June 17th, 2023	09:00-11:00	Smart buildings	A Novel Time-Driven Twin CNN-based NILM Framework Using Double Grayscale Images of Odd Harmonic Currents	Petros G. Papageorgiou (Department of Electrical and Computer Engineering, University of Western Macedonia, Kozani, Greece)*; Georgios C. Christoforidis (Department of Electrical and Computer Engineering, University of Western Macedonia, Kozani, Greece); Aggelos S. Bouhouras (Department of Electrical and
240	M1-TS1	Monday, June 17th, 2023	09:00-11:00	Smart buildings	Review of Parameters and Techniques in Human-Centered Integrative Lighting	Hector F. Chinchero (University of Alcala)*; Javier Ribas (University of Oviedo); Pablo Quintana-Barcia (University of Oviedo); J. Marcos Alonso (University of
119	M1-TS2	Monday, June 17th, 2023	09:00-11:00	SS - Data-driven solutions for e-mobility	Genetic Algorithm Strategies for Public Bus Fleet Composition	Alessandro Saldarini (Politecnico di Milano)*; Michela Longo (Politecnico di Milano); Morris Brenna (Politecnico di Milano); Cristian G Colombo (Politecnico di
123	M1-TS2	Monday, June 17th, 2023	09:00-11:00	SS - Data-driven solutions for e-mobility	Unlocking Demand Response Potentials by Electric Vehicle Charging Stations in Smart Grids	Mohammad Sadegh Javadi Estahbanati (INESC TEC)*; Mohammad Javadi (Prof. Mohammad Javadi)
139	M1-TS2	Monday, June 17th, 2023	09:00-11:00	SS - Data-driven solutions for e-mobility	Smart Fleet Management for Urban Sustainability: Analysis, Optimization, and Electrification Approach in Narni District's Waste Collection	Mohammad Ghoreishi (Sapienza University of Rome)*; Tommaso Bragatto ("Sapienza" University of Rome); Francesca Santori (A.S.M. Terni S.p.A.); Massimo
176	M1-TS2	Monday, June 17th, 2023	09:00-11:00	SS - Data-driven solutions for e-mobility	Integration of Vehicle-to-Grid (V2G) Technology to Enhanced Smart Grid Management: A Case Study of Electric Mobility in Rome	Mohadeseh Pasha (Sapienza University of Rome)*; Reza Najafi (Sapienza University of Rome); Chiara Colombaroni (Sapienza University of Rome); Gaetano
319	M1-TS2	Monday, June 17th, 2023	09:00-11:00	SS - Data-driven solutions for e-mobility	Electric Vehicles Charging Stations Service Area Assessment Using Spatial Analysis	Babak Ranjgar (Politecnico di milano)*; Seyed Mahdi Miraftabzadeh (Politecnico di Milano); Alessandro Niccolai (Politecnico di Milano); Michela Longo
343	M1-TS2	Monday, June 17th, 2023	09:00-11:00	SS - Data-driven solutions for e-mobility	Energy Consumption of Electric Buses Under Operational Data of Transit System	Arsalan Najafi (Department of of Architecture and Civil Engineering Chalmers University of Technology); Omkar Parishwad (Department of of Architecture and Civil Engineering Chalmers University of Technology); Antonia Wise (Department of of Architecture and Civil Engineering Chalmers University of Technology);
37	M1-TS3	Monday, June 17th, 2023	09:00-11:00	Regulation and electricity markets	Multi-Horizon Energy Markets: Optimization of Resilient Operational Scheduling	Hadi Shahcheraghi (Shahid Beheshti University); Mehrdad Setayesh Nazar (Shahid Beheshti University); Seyed Mahoor Ebrahimi (University of Vaasa)*;
85	M1-TS3	Monday, June 17th, 2023	09:00-11:00	Regulation and electricity markets	Secure and Efficient Peer-to-Peer Energy Trading: A Case Study on Edge Computing Simulation Platform for Decentralized Decision Making	Eslam Mofreh (Eindhoven University of Technology)*; P.H. Nguyen (Eindhoven University of Technology); Koen Kok (Eindhoven University of Technology)
89	M1-TS3	Monday, June 17th, 2023	09:00-11:00	Regulation and electricity markets	Techincal-Financial Assessentment of Offshore Wind Farm in Southern Brazil	Gustavo S Djamboldkdjian (Universidade Federal do Rio Grande do Sul)*; Leonardo N Silva (UFRGS); Daniel S Gazzana (Federal University of Rio Grande do Sul
128	M1-TS3	Monday, June 17th, 2023	09:00-11:00	Regulation and electricity markets	Frequency Restoration and Replacement Reserve Analysis under Increasing Renewable Energy Source Integration: the Spanish Case Study	Ana Fernández-Guillamón (Universidad de Castilla-La Mancha)*; Angel Molina-Garcia (Universidad Politecnica de Cartagena); Antonio Viguetas Rodríguez
178	M1-TS3	Monday, June 17th, 2023	09:00-11:00	Regulation and electricity markets	Robust-Stochastic Optimization Model for Strategic Participation of Aggregators in Day-Ahead Market	Mohammadamin MAM Mobtahej (Lamar University)*
271	M1-TS3	Monday, June 17th, 2023	09:00-11:00	Regulation and electricity markets	Flexibility activation from multi-energy systems controlled by timed automata	Edoardo Corsetti (RSE)*
316	M1-TS3	Monday, June 17th, 2023	09:00-11:00	Regulation and electricity markets	Hierarchical AC Optimal Power Flow of Multi-microgrid Systems Using a Combination of Learning-based and Lagrangian Methods	Ronald R Cabaoig (University of the Philippines)*; Michael Angelo Pedrasa (University of the Philippines)
41	M1-TS4	Monday, June 17th, 2023	09:00-11:00	SS - Smart solutions and strategies for environmental comfort, energy saving and climate resilient indoor and outdoor spaces	Assessment of performance of Hybrid Heat Pump system during winter season in different climatic conditions	Marina Bonomolo (University of Palermo)*; Giuliana Leone (University of Palermo); Alessio Coga (University of Palermo); Stefania Guarino (University of
60	M1-TS4	Monday, June 17th, 2023	09:00-11:00	SS - Smart solutions and strategies for environmental comfort, energy saving and climate resilient indoor and outdoor spaces	Energy Saving: Post-Intervention Analysis of the 'Superbonus 110%' in a Sports Facility	Andrea Fioravanti (University of L'Aquila, Department of Industrial and Information Engineering and Economics)*; Alberto Prudenzi (University of L'Aquila);
106	M1-TS4	Monday, June 17th, 2023	09:00-11:00	SS - Smart solutions and strategies for environmental comfort, energy saving and climate resilient indoor and outdoor spaces	Development of a first prototype for low-cost kit for DLCs design	Marina Bonomolo (University of Palermo); Alessandro Biondi (University of Palermo); Cristina Baglivo (Università del Salento); Massimiliano Di Liberto (University of Palermo); Alessio Leto (University of Palermo); Marco Beccali (Università di Palermo - Dipartimento di Ingegneria)*
157	M1-TS4	Monday, June 17th, 2023	09:00-11:00	SS - Smart solutions and strategies for environmental comfort, energy saving and climate resilient indoor and outdoor spaces	Preliminary analysis for sizing packaged HVAC systems. The roles of heat recovery and compressor energy consumption	pierluca martorana (University of Palermo); Vinzenzo Franzitta (University of Palermo); Domenico Curto (University of Palermo); andrea guercio (University of Palermo); Malik Ali Judge (University of Palermo)*; stefano mangione (University of Palermo); Margherita Frascati (University of Palermo)
237	M1-TS4	Monday, June 17th, 2023	09:00-11:00	SS - Smart solutions and strategies for environmental comfort, energy saving and climate resilient indoor and outdoor spaces	Thermal Model for Homes with Two AC Units	yahia baghzouz (UNLV)*
282	M1-TS4	Monday, June 17th, 2023	09:00-11:00	SS - Smart solutions and strategies for environmental comfort, energy saving and climate resilient indoor and outdoor spaces	Effect of the Accumulation Capacity on the Energy Performance of a Green Hydrogen Production Plant	Laura Cirrincione (Università di Palermo)*; Concettina Marino (Mediterranean University of Reggio Calabria); Antonino Nucara (Mediterranean University of Reggio Calabria); Maria Francesca Panzera (Mediterranean University of Reggio Calabria); Matilde Pietrafesa (Mediterranean University of Reggio Calabria);
300	M1-TS4	Monday, June 17th, 2023	09:00-11:00	SS - Smart solutions and strategies for environmental comfort, energy saving and climate resilient indoor and outdoor spaces	Literature review on metrics to assess the thermal resilience of buildings to climate change	Giorgia Peri (Università di Palermo - DEIM)*; Vasiliki Geropanta (School of Architecture, Technical University of Crete- TUC); Maria La Gennusa (Università
75	M1-TS5	Monday, June 17th, 2023	09:00-11:00	SS - Energy communities for energy-efficient and flexible production and consumption	Internet of Energy for Energy Management of Interconnected Local Energy Communities: Case study in BAM Campus - The Netherlands	Trung Tran (Technische Universiteit Eindhoven)*; Van der Pijl A. A. (Technische Universiteit Eindhoven); An Nguyen (Eindhoven University of Technology);
79	M1-TS5	Monday, June 17th, 2023	09:00-11:00	SS - Energy communities for energy-efficient and flexible production and consumption	Electric Vehicle Flexibility Harnessing through Local Energy Community Operation Optimization: Maximizing Local Energy Utilization	Enielma Cunha da Silva (Universidade Estadual Paulista)*; Carlos Sabillon (Universidad Loyola Andaluca); Bala Venkatesh (Toronto Metropolitan University);
257	M1-TS5	Monday, June 17th, 2023	09:00-11:00	SS - Energy communities for energy-efficient and flexible production and consumption	Energy community with semi-public system of EV stations, carport and batteries energy storage	George Cristian Lazaroiu (University POLITEHNICA of Bucharest)*
278	M1-TS5	Monday, June 17th, 2023	09:00-11:00	SS - Energy communities for energy-efficient and flexible production and consumption	Energy Communities Development: a Review of Challenges and Opportunities	SAEED KHORRAMI (Sapienza University of Rome)*; Maria Carmen Falvo (Sapienza University of Rome); Massimo Pompili (Sapienza University of Rome)
286	M1-TS5	Monday, June 17th, 2023	09:00-11:00	SS - Energy communities for energy-efficient and flexible production and consumption	Aggregated Energy Management of Multiple Factories that Purchased Green Energy Collectively	Leehter Yao (National Taipei U. of Tech.)*; Cheng-Yu Ku (National Taipei U. of Tech.); J. C. Teo (National Technology University Taipei)
324	M1-TS5	Monday, June 17th, 2023	09:00-11:00	SS - Energy communities for energy-efficient and flexible production and consumption	Stability Assessment of Virtual Synchronous Generator based on Double-Loop Control towards Net Zero Energy System	Thongchart Kerdphol (Kasetsart University)*
35	N1-TS1	Monday, June 17th, 2023	11:30-13:30	Renewable energy sources and storage- 1	Study of the influence of the motion limit of a horizontal single-axis tracker on the annual incident energy in a PV power plant	Arsenio Barbon (Oviedo University); Covadonga Bayon-Cueli (DNV UK Limited); Luis Bayon (Oviedo University)*; Veronica Carreira-Fontao (Oviedo University)
66	N1-TS1	Monday, June 17th, 2023	11:30-13:30	Renewable energy sources and storage- 1	Deep Analysis of Quasi-MPPT Hysteresis Control for Multiple Energy Sources in Low-Power Energy Harvesting	Mashiul HUQ (Université de Lorraine, CNRS, UL, F-54000 Nancy, France); Slavisa Jovanovic (Nil); Philippe Poure (please add your institution)*
68	N1-TS1	Monday, June 17th, 2023	11:30-13:30	Renewable energy sources and storage- 1	Research on corporate decarbonization planning considering the uncertainty of procuring renewable energy certificates	Taichi Obara (The university of Tokyo)*; Kenji Tanaka (The University of Tokyo)
74	N1-TS1	Monday, June 17th, 2023	11:30-13:30	Renewable energy sources and storage- 1	Determining the likely tracking choices for utility scale photovoltaic power plants	Shaniel Lakhoo (Stellenbosch University)*; Bernard Bekker (Stellenbosch University); Christina Auret (Stellenbosch University)
78	N1-TS1	Monday, June 17th, 2023	11:30-13:30	Renewable energy sources and storage- 1	Improving short-term wind power predictability by strategically placing weather stations	Olga Kyagina (INESC TEC)*; Ricardo J. Bessa (INESC TEC); David Pozo (European Commission JRC)
310	N1-TS1	Monday, June 17th, 2023	11:30-13:30	Renewable energy sources and storage- 1	State of art on large-scale storage systems policies in European Countries	Andrea Paolacci (Sapienza)*; Andrea Paolacci (Sapienza - Università di Roma)
323	N1-TS1	Monday, June 17th, 2023	11:30-13:30	Renewable energy sources and storage- 1	Evaluation of Voltage Profile in Distribution Networks with High Penetration of Photovoltaic Energy Associated with Battery Energy Storage Systems	Diego Jose da Silva (Federal University of ABC)*; EDMARCIO ANTONIO BELATI (CECS/UFABC); Jesus López-Lezama (Universidad de Antioquia); Mahdi
10	N1-TS2	Monday, June 17th, 2023	11:30-13:30	SS - Innovations in electric mobility – Technical, environmental, and social challenges of the transition	Optimizing Wireless Power Transfer Systems for Improved Efficiency through Geometric and Dimensional Alignments	Osama Mohammed (Florida International University)*; Ahmed Ibrahim (Florida International University); Ahmed S Soliman (Florida International University)
51	N1-TS2	Monday, June 17th, 2023	11:30-13:30	SS - Innovations in electric mobility – Technical, environmental, and social challenges of the transition	Concept and Preliminary Design of a Stand-Alone Charging Station for Light Electric Vehicles	Antony Vasile (Università degli Studi di Brescia)*; Marco Pasetti (Università degli Studi di Brescia); Davide Astolfi (University of Brescia); Gaetano Zizzo (Università di Palermo); Eleonora Riva Sanseverino (University of Palermo); Alessandra Flammini (Università degli Studi di Brescia)
64	N1-TS2	Monday, June 17th, 2023	11:30-13:30	SS - Innovations in electric mobility – Technical, environmental, and social challenges of the transition	Time-of-Use Electricity Utilization for EV Charging through Smart Systems with Battery Integration	Ijais Ali (University of Palermo)*; Maria Luisa Di Silvestre (University of Palermo); Gaetano Zizzo (DEIM University of Palermo); Pio Alessandro Lombardi
86	N1-TS2	Monday, June 17th, 2023	11:30-13:30	SS - Innovations in electric mobility – Technical, environmental, and social challenges of the transition	Investigating the Role of Electric Vehicles in Providing Frequency Response in Low-inertia Islanded Power Grids	Sajjad Fattaheian Dehkordi (Aalto University)*
93	N1-TS2	Monday, June 17th, 2023	11:30-13:30	SS - Innovations in electric mobility – Technical, environmental, and social challenges of the transition	Electric Vehicles Maintenance: Recommendations for a Safe Work	Pietro Colella (Politecnico di Torino)*; Enrico Pons (Politecnico di Torino)
102	N1-TS2	Monday, June 17th, 2023	11:30-13:30	SS - Innovations in electric mobility – Technical, environmental, and social challenges of the transition	Optimal Operation of Renewable Energy Resources and Electric Vehicles in Microgrids	Vahid Shahbazbegian (University of Vaasa); Joao P.D.B. Pereira (FEUP); Miadreza Shafie-khah (University of Vaasa); Gerardo J. Osório (REMIT, Portucalense
4	N1-TS3	Monday, June 17th, 2023	11:30-13:30	Environmental phenomena and pollution	Analytical Data-Driven Method for Geomagnetic Disturbance Uncertainty Quantification Compensation	Arturo Bretas (University of Florida)*
11	N1-TS3	Monday, June 17th, 2023	11:30-13:30	Environmental phenomena and pollution	Assessment of Greenhouse Gas Emission Reduction Strategies in Electricity Grid of Türkiye by Utilizing EnergyPLAN Simulation	Cagdas Karakus (Politechnika Wroclawska)*; Zbigniew Leonowicz (Wroclaw University of Science and Technology); Jakob Zinck Thellufsen (Aalborg University)
12	N1-TS3	Monday, June 17th, 2023	11:30-13:30	Environmental phenomena and pollution	Assessment and Evaluation of Air Pollutants at Dehradun and Haridwar Region, Uttarakhand, India.	Avnish Chauhan (Graphic Era Hill University, Dehradun, Uttarakhand)*; Anirudh Tomar (Graphic Era Hill University); Vijay Kumar (Graphic Era Hill University Dehradun); Prernaa Sharma (Graphic Era Hill University, Dehradun, Uttarakhand); PP Pathak (Gurukula Kangri University, Haridwar, Uttarakhand, India)
33	N1-TS3	Monday, June 17th, 2023	11:30-13:30	Environmental phenomena and pollution	Forecasting Short-term Fine Particulate Matter Concentration Using an Autoregressive Model	Longkai Ma (harvard university)*
156	N1-TS3	Monday, June 17th, 2023	11:30-13:30	Environmental phenomena and pollution	Visual interaction and its effects on the design of HV towers	Luca Buono (TERNA); Alexa Mariela Lopez Diaz (Terna)*; Gaia Leone (Terna); Lorenzo Papi (Terna); Maria Rosaria Guarniere (Terna); Francesco Palone
314	N1-TS3	Monday, June 17th, 2023	11:30-13:30	Environmental phenomena and pollution	Prediction and Analysis of Shielding Effectiveness in Conducting Polymer Composites Using the Transmission Line Matrix Method: Applications in Near and Far Fields	Karim Benzaoui (Laboratory Electromagnetic Compatibility, Ecole Militaire Polytechnique)*; Youcef Amine MEDJAOURI (Ecole Militaire Polytechnique); Achour ALES (Electromagnetic Compatibility Laboratory , Ecole Militaire Polytechnique, BP 17 Bordj El-Bahri 16111 Algiers, Algeria)
39	N1-TS4	Monday, June 17th, 2023	11:30-13:30	SS - Smart strategies for reliability, technical and 3E assessment in renewable energy systems	Knowledge-Discovery-Based Methods for Wind Power Generators Performance Analysis	Davide Astolfi (University of Brescia)*; Marco Pasetti (Università degli Studi di Brescia); Fabrizio De Caro (University of Salerno); Antony Vasile (Università degli
112	N1-TS4	Monday, June 17th, 2023	11:30-13:30	SS - Smart strategies for reliability, technical and 3E assessment in renewable energy systems	Economic and Environmental Assessment of Industrial Renewable Energy Communities	Simone Negri (Politecnico di Milano); Nicola Blasutigh (University of Trieste)*; Claudio Pagani (ELCO & EBNER Engineering); Alessandro Massi Pavan
159	N1-TS4	Monday, June 17th, 2023	11:30-13:30	SS - Smart strategies for reliability, technical and 3E assessment in renewable energy systems	Comparative Analysis for Prediction for Photovoltaic Modules with Different Technologies Tested in Italy and in Spain	Gabriele Malgaroli (POLITECNICO DI TORINO)*; Alessandro Ciocia (Politecnico di Torino); Slawomir Gulkowski (Lublin University of Technology); José Vicente
185	N1-TS4	Monday, June 17th, 2023	11:30-13:30	SS - Smart strategies for reliability, technical and 3E assessment in renewable energy systems	Fault diagnosis of photovoltaic modules using infrared images and hybrid DCNNs: A comparative study	Chourouk Moussaoui (University of Jijel)*; Adel Mellit (Jijel university); Pastore Stefano (University of Trieste); Alessandro Massi Pavan (University of Trieste
188	N1-TS4	Monday, June 17th, 2023	11:30-13:30	SS - Smart strategies for reliability, technical and 3E assessment in renewable energy systems	Performance, reliability and economy of DFIGs for micro-hydropower applications: a case study	Valerio Ciccariello (Dept. of Astronautics, Electrical & Energetic Engn); Stefano Elia (Dept. of Astronautics, Electrical & Energetic Engn); Manlio Pasquali (ENEA);
263	N1-TS4	Monday, June 17th, 2023	11:30-13:30	SS - Smart strategies for reliability, technical and 3E assessment in renewable energy systems	Unsupervised Anomaly Detection of Shipboard Electrical Power Consumption through GRU Autoencoder model	Giuseppe La Tona (Consiglio Nazionale delle Ricerche (CNR))*; Paolo Fazzini (Consiglio Nazionale delle Ricerche (CNR)); Maria Carmela Di Piazza (Consiglio
19	N1-TS5	Monday, June 17th, 2023	11:30-13:30	SS - Transport systems and sustainable mobility - 1	Predictive Model to assess Pollution from Road Runoff Waters as a Tool to Increase Sustainable Mobility	Maria Vittoria Corazza (Sapienza University of Rome)*; Laura Moretti (Sapienza University of Rome); Giulia Del
23	N1-TS5	Monday, June 17th, 2023	11:30-13:30	SS - Transport systems and sustainable mobility - 1	Fuel Cell Electric Vehicles: Literature Analysis to Identify Barriers to their Deployment and Possible Mitigation Strategies	Mariano Gallo (Universita' del Sannio - Dipartimento di Ingegneria)*
72	N1-TS5	Monday, June 17th, 2023	11:30-13:30	SS - Transport systems and sustainable mobility - 1	Calibrating shortest paths on OpenStreetMap networks using Google routing API	Salar Salehi (sapienza university)*; Ken Varghese (Sapienza University); Lory Bresciani (Sapienza University); Guido Gentile (Sapienza University); Arif Huseynov
175	N1-TS5	Monday, June 17th, 2023	11:30-13:30	SS - Transport systems and sustainable mobility - 1	Utilizing E-mobility and Machine Learning for Bike-Sharing Demand Prediction	Marzieh Afsari (Sapienza university of Rome)*; Mosaddeq Dastmard (Sapienza university of Rome); Lory Michelle Bresciani Miristice (Sapienza university of
208	N1-TS5	Monday, June 17th, 2023	11:30-13:30	SS - Transport systems and sustainable mobility - 1	Diffusion models: an application to evaluate the spread of electric vehicle on the city of Salerno (south of Italy)	Stefano De Luca (University of Salerno); Chiara Fiori (University of Salerno)*; Francesca Bruno (University of Salerno)
248	N1-TS5	Monday, June 17th, 2023	11:30-13:30	SS - Transport systems and sustainable mobility - 1	Effects of the Passenger Weight on the Train Running Times and Related Implications on Service Frequencies	Luca D'Acierno (Federico II University of Naples)*; Luca De Matteis (Federico II University of Naples); Rosario Stefanelli (Federico II University of Naples);
13	A1-TS1	Monday, June 17th, 2023	15:00-17:00	Power systems and smart grids - 1	Electrical Flexibility Forecasting and Assessment for Heat-Pump-Based District Heating Systems	Roberto Rocca (CIRCE Technology Centre)*; Lorena Elorza-Uriarte (CIRCE Technology Centre); Arjen Schamhart (Energie Samen Rivierenland); Gerwin
20	A1-TS1	Monday, June 17th, 2023	15:00-17:00	Power systems and smart grids - 1	Experimental Validation of Adaptive Protection Scheme for DG-integrated Power Network with Interactive Monitoring	Hamdy Ahmed Ashour (Arab Academy for Science and Technology)*
73	A1-TS1	Monday, June 17th, 2023	15:00-17:00	Power systems and smart grids - 1	Analysis of Cable-Transformer Resonant Interactions due to CB Prestriking Transients	Behzad Behdani (Delft University of Technology)*; Mohamad Ghaffarian Niasar (Delft University of Technology); Marjan Popov (Delft University of Technology)
207	A1-TS1	Monday, June 17th, 2023	15:00-17:00	Power systems and smart grids - 1	Investment Planning for Risk Mitigation in Low Voltage Distribution Networks	Tommaso Bragatto (Sapienza University of Rome); Fabio Massimo Gatta (Sapienza University of Rome); Alberto Geri (Sapienza University of Rome); Marco Maccioni (Sapienza University of Rome)*; Ludovico Nati (Areti S.p.A.); Alessandro Palazzoli (Areti S.p.A.); Paolo Sancioni (Areti S.p.A.)
210	A1-TS1	Monday, June 17th, 2023	15:00-17:00	Power systems and smart grids - 1	A Data-driven Probabilistic Power Flow Analysis Considering Voltage-dependent Loads	Seyed Farhad S.F. Zandrazavi (University of Vaasa)*; Miadreza Shafie-khah (University of Vaasa); Meysam Pashaei (University of Vaasa); Natały Bañol Arias
221	A1-TS1	Monday, June 17th, 2023	15:00-17:00	Power systems and smart grids - 1	A stochastic model for co-optimisation of interconnected power and gas systems with wind power plants, storage systems and responsive demands	Ahmad Rezaee Jordehi (Islamic Azad University, Iran)*; Seyed Amir Mansouri (Comillas Pontifical University); Marcos Tostado (University of Jaén)
243	A1-TS1	Monday, June 17th, 2023	15:00-17:00	Power systems and smart grids - 1	Toward Automation for Geographically Distributed Power Hardware-in-the-loop experiments	PHAM Minh Cong (French Alternative Energies and Atomic Energy Commission)*; Thien Phong Tran (French Alternative Energies and Atomic Energy
59	A1-TS2	Monday, June 17th, 2023	15:00-17:00	SS - Towards the next generation of smart grids-based multi-energy systems raising ICT cutting-edge solutions (IntelliGrid)	Improving Dynamic Response of Hydro Power Plants Using Electrical Energy Storage in Low-inertia Power Grids	Ramin Ahmadi Kordkheili (Aalto University)*; Sajjad Fattaheian-Dehkordi (Aalto University); Matti Lehtonen (Aalto University Finland)
91	A1-TS2	Monday, June 17th, 2023	15:00-17:00	SS - Towards the next generation of smart grids-based multi-energy systems raising ICT cutting-edge solutions (IntelliGrid)	GAIA meta-platform: enabling multi-energy vectors data analysis via IoT federation	Alessio Viticchié (AlphaWaves); Felice Cetrone (ALPHAWAVES S.R.L.); Christian Camarda (Midori srl); Virginia Vassallo (Midori srl); Leonardo Napoli (Bosco Elettronica srl); Edoardo Patti (Politecnico di Torino, Department of Control and Computer Engineering); Alessandro Aliberti (Politecnico di Torino,
101	A1-TS2	Monday, June 17th, 2023	15:00-17:00	SS - Towards the next generation of smart grids-based multi-energy systems raising ICT cutting-edge solutions (IntelliGrid)	Impact of Uncertainty on Energy Hub Optimization Based on Energy Resources Distribution and Demand Response	Tiago M. M. Azevedo (FEUP); Morteza Vahid-Ghavidel (University of Tabriz); Sérgio F Santos (INESC TEC - Institute for Systems and Computer Engineering, Technology and Science); Gerardo J. Osório (REMIT, Portucalense Univ. Infante D. Henrique,)*; João P Catalão (Faculty of Engineering of University of Porto,
120	A1-TS2	Monday, June 17th, 2023	15:00-17:00	SS - Towards the next generation of smart grids-based multi-energy systems raising ICT cutting-edge solutions (IntelliGrid)	An automated tool for Urban Building Energy Modelling: from sparse datasets to CityJSON	Pietro Rando Mazzarino (Politecnico di Torino)*; Salvatore Finocchiaro (Politecnico di Torino); Luca Barbierato (Politecnico di Torino); Daniele S Schiera (Politecnico di Torino); Lorenzo Bottaccioli (Politecnico di Torino); Edoardo Patti (Politecnico di Torino, Department of Control and Computer Engineering)
198	A1-TS2	Monday, June 17th, 2023	15:00-17:00	SS - Towards the next generation of smart grids-based multi-energy systems raising ICT cutting-edge solutions (IntelliGrid)	A Distributed IoT Software Infrastructure for Multi-Purpose Services in Multi-Energy Systems	Rafael Natalio Fontana Crespo (Politecnico di Torino)*; Yingjun Luo (Politecnico di Torino); Manuela Baracani (Politecnico di Torino); Paolo Squillari (Politecnico di Torino); Fabio Favoino (Politecnico di Torino); Edoardo Patti (Politecnico di Torino, Department of Control and Computer Engineering)
261	A1-TS2	Monday, June 17th, 2023	15:00-17:00	SS - Towards the next generation of smart grids-based multi-energy systems raising ICT cutting-edge solutions (IntelliGrid)	Hybrid System for Solar Irradiance Forecasting in Photovoltaic Panels – Case Study for Selected Locations in Poland	Kacper Książek (University of Silesia in Katowice); Małgorzata Przybyla-Kasperek (Uniwersytet Śląski w Katowicach); Michał Jasiński (Wroclaw University of
15	A1-TS3	Monday, June 17th, 2023	15:00-17:00	Circuits, sensors, and actuators	A Novel Topology for High Voltage Battery Energy Storage Systems	Jose M. Guerrero (Universidad del País Vasco/Euskal Herriko Unibertsitatea)*; Jelena Stojkovic Terzic (University of Belgrade); Unai Villena (Universidad del País Vasco/Euskal Herriko Unibertsitatea)*; Jelena Stojkovic Terzic (University of Belgrade); Marene Larruskain (Universidad del País Vasco/Euskal Herriko
24	A1-TS3	Monday, June 17th, 2023	15:00-17:00	Circuits, sensors, and actuators	Electrical Engineers and the Infinity in Power Systems	Massimo Mitolo (Irvine Valley College); Silvano Vergura (Dept. of Electrical and Information Engineering)*
226	A1-TS3	Monday, June 17th, 2023	15:00-17:00	Circuits, sensors, and actuators	Mathematical Model of Brushless Doubly Fed Induction Machine	Nikolay Djagarov (Nikola Vaptsarov Naval Academy)*
260	A1-TS3	Monday, June 17th, 2023	15:00-17:00	Circuits, sensors, and actuators	Series-Series Versus Series-Parallel in Terms of Stability Issues for Inductive Power Transfer Systems	Ioana-Gabriela Sirbu (University of Craiova)*; Lucian Mandache (University of Craiova); Dan Gabriel I Stanescu (University of Craiova, Faculty of Electrical
285	A1-TS3	Monday, June 17th, 2023	15:00-17:00	Circuits, sensors, and actuators	A Jigsaw Approach for Electrical Engineering: Transient Stability Analysis of a Synchronous Machine	Manuela Minetti (University of Genoa)*
321	A1-TS3	Monday, June 17th, 2023	15:00-17:00	Circuits, sensors, and actuators	Smart Irrigation in Precision Agriculture Using A Real-time System Leveraging IoT, Cloud Computing, and Machine Learning	FATIMA ZAHRA BASSINE (IWRI); fatima zahra bassine (ENSEM)*
1	A1-TS4	Monday, June 17th, 2023	15:00-17:00	Measurements	A Frequency Stability Scheme Based on Dynamic Estimation and Spectral Clustering	Arturo Bretas (University of Florida)*
14	A1-TS4	Monday, June 17th, 2023	15:00-17:00	Measurements	Enhancing the Dielectric Strength of Silicone Rubber (SiR) Using Nano Al2O3 Additives under Varying Environmental Conditions	Suod MM Aldosary (Prince Sattam Bin Abdulaziz University)*; Ahmed A. Hossam-Eldin (Alexandria University); Loai S. El-deen (Aswan University); Kareem M.
246	A1-TS4	Monday, June 17th, 2023	15:00-17:00	Measurements	Prediction of Line Ampacity from Distributed Monitoring and Weather Forecasting	Igor Albizu (University of the Basque Country); Rafael Alberdi (University of the Basque Country); Elvira Fernandez (University of the Basque Country)*; M.
303	A1-TS4	Monday, June 17th, 2023	15:00-17:00	Measurements	Analysis of electric arc furnace influence on power quality in low and medium voltage networks	Dariusz Grabowski (Silesian University of Technology)*; Maciej Klimas (Silesian University of Technology); Andrzej Lange (University of Warmia and Mazury)
325	A1-TS4	Monday, June 17th, 2023	15:00-17:00	Measurements	Improving Low-Frequency Performance of Measurement Device for Frequency-Dependent Soil Properties	Dmitry Kuklin (Northern Energetics Research Centre)*
338	A1-TS4	Monday, June 17th, 2023	15:00-17:00	Measurements	Anomaly Detection in Load Forecasting for Electric Vehicles Using Image Processing Techniques	Saba Marandi (Concordia University)*; Arash Moradzadeh (Qatar University); Hamed Moayyed (Polytechnic of Porto); Chadi Assi (Concordia University);
65	A1-TS5	Monday, June 17th, 2023	15:00-17:00	SS - Transport systems and sustainable mobility - 2	Method for Defining Electromagnetic Interferencies in the Metro Track Circuits	Tetiana Serdiuk (Ukrainian State University of Science and Technologies)*; Maksym Serchenko (Ukrainian State University of Science and Technologies)
145	A1-TS5	Monday, June 17th, 2023	15:00-17:00	SS - Transport systems and sustainable mobility - 2	Mid-Term Feasibility Assessment of Battery Electric Trucks and Fuel Cell Electric Trucks	Fabio Borghetti (Politecnico di Milano); Michela Longo (Politecnico di Milano); Andrea Di Martino (Politecnico di Milano)*; Renato Mazzoncini (Politecnico di
216	A1-TS5	Monday, June 17th, 2023	15:00-17:00	SS - Transport systems and sustainable mobility - 2	Safety and Energy Assessment of Electric Vehicles equipped with Adaptive Cruise Control system	Angelo Coppola (University of Naples)*; Andrea Marchetta (University of Naples)
228	A1-TS5	Monday, June 17th, 2023	15:00-17:00	SS - Transport systems and sustainable mobility - 2	Reducing Greenhouse Gas Emissions of the Transport Sector in Urban Areas: a Review	Muhammad Waseem (Politecnico di Torino); Pietro Colella (Politecnico di Torino)*; Enrico Pons (Politecnico di Torino); Marianna Costa (Gruppo Trasporti
287	A1-TS5	Monday, June 17th, 2023	15:00-17:00	SS - Transport systems and sustainable mobility - 2	Optimized Smart Charging of Electric Bus Fleets for Greenhouse Gas Emission Minimization	Benjamin Blat Belmonte (Technical University of Darmstadt)*; Georg Avemarie (Technical University of Darmstadt); Stephan Rinderknecht (Technical
330	A1-TS5	Monday, June 17th, 2023	15:00-17:00	SS - Transport systems and sustainable mobility - 2	Correlation of OD matrix and traffic volume with functional data analysis: a Simulation-Based Case Study in the city of Portici	Alessandra Marisa Tascione (Università degli Studi di Napoli Federico II); Luca Di Costanzo (University of Naples "Federico II"); Davide Forcina (University of Naples "Federico II"); Luigi Pariota (University of Naples)*; Christian Capezza (University of Naples "Federico II"); Fulvio Simonelli (University of Naples Federico
90	M2-TS1	Tuesday, June 18th, 2023	09:00-11:00	Renewable energy sources and storage- 2	Conversion of Wind Power Plants to Hybrid Power Plants	Leonardo N Silva (UFRGS)*; Gustavo S Djamboldkdjian (Universidade Federal do Rio Grande do Sul); Daniel S Gazzana (Federal University of Rio Grande do Sul
92	M2-TS1	Tuesday, June 18th, 2023	09:00-11:00	Renewable energy sources and storage- 2	Energy Storage Systems Planning in the Electric Distribution System Considering the Grow of PV Penetration

126	M2-TS4	Tuesday, June 18th, 2023	09:00-11:00	SS - New perspectives on BIPVs (Building Integrated Photovoltaic systems): numerical and experimental studies on the PV cells, power converter, control systems, and storage	Monitoring of BIPV by means of a low cost wireless sensor network	Antonino Laudani (University of Catania)*; Fabio Corti (University of Florence); Matteo Intravaia (Università degli Studi di Firenze); Gabriele Maria Lozito
132	M2-TS4	Tuesday, June 18th, 2023	09:00-11:00	SS - New perspectives on BIPVs (Building Integrated Photovoltaic systems): numerical and experimental studies on the PV cells, power converter, control systems, and storage	Development of a new LED-based solar simulator for building-integrated photovoltaic characterization	Elisa Belloni (Università degli Studi di Perugia)*; Marco Casini (University of Siena); Antonio Faba (Università degli Studi di Perugia); Antonino Laudani
133	M2-TS4	Tuesday, June 18th, 2023	09:00-11:00	SS - New perspectives on BIPVs (Building Integrated Photovoltaic systems): numerical and experimental studies on the PV cells, power converter, control systems, and storage	Bifacial PV-based glazed façade applied to an office building: analysis of electric energy balance by means of artificial intelligence	Elisa Belloni (Università degli Studi di Perugia); Flavia Forconi (Università degli Studi Roma Tre); Gabriele Maria Lozito (Università degli Studi di Firenze); Luigi
170	M2-TS4	Tuesday, June 18th, 2023	09:00-11:00	SS - New perspectives on BIPVs (Building Integrated Photovoltaic systems): numerical and experimental studies on the PV cells, power converter, control systems, and storage	Application of deep learning algorithms for BIPV power forecasting in Italy	Rafiq Asghar (Roma Tre University)*; Francesco Riganti Fulginei (Rome Tre University); Michele Quercio (Roma Tre University); Muhammad Ahmad (University
232	M2-TS4	Tuesday, June 18th, 2023	09:00-11:00	SS - New perspectives on BIPVs (Building Integrated Photovoltaic systems): numerical and experimental studies on the PV cells, power converter, control systems, and storage	A Modular Electrothermal Photovoltaic Array Model for BIPV Applications	Orlando Gonzales (University of Colorado Denver); Miguel Angel Huerta Quian (Universidad Técnica Federico Santa María); Elisa Belloni (Università degli Studi di Perugia)*; Alejandro Angulo (Universidad Técnica Federico Santa María); Fernando Mancilla-David (University of Colorado Denver)
153	M2-TS5	Tuesday, June 18th, 2023	09:00-11:00	SS - PNRR PE2: Spoke 8 Final use optimization, sustainability & resilience in energy supply chain: a right track for a greener future - 1	Life Cycle Assessment Impact Indicators for Simulation-Based Optimization of Buildings	Laura Cirrincione (Università di Palermo)*; Sonia Longo (Università di Palermo); Francesco Montana (University of Palermo); Giorgia Peri (Universit? di Palermo
206	M2-TS5	Tuesday, June 18th, 2023	09:00-11:00	SS - PNRR PE2: Spoke 8 Final use optimization, sustainability & resilience in energy supply chain: a right track for a greener future - 1	Renewable Energy Community Planning Combining Multi-Objective Optimization and Uncertainty Assessment	Maria Luisa Di Silvestre (University of Palermo); Fabio Massaro (University of Palermo); Francesco Montana (University of Palermo)*; Eleonora Riva
223	M2-TS5	Tuesday, June 18th, 2023	09:00-11:00	SS - PNRR PE2: Spoke 8 Final use optimization, sustainability & resilience in energy supply chain: a right track for a greener future - 1	Net zero emissions and positive energy districts: a potential solution to achieve the European climate targets	Jacopo Famiglietti (Politecnico di Milano)*; Giorgio Villa (Politecnico di Milano); Michela Romagnosi (Politecnico di Milano); Alice Dénarié (Politecnico di
253	M2-TS5	Tuesday, June 18th, 2023	09:00-11:00	SS - PNRR PE2: Spoke 8 Final use optimization, sustainability & resilience in energy supply chain: a right track for a greener future - 1	Clean lift: a case study from industrial to civil application	Francesco Romano (Politecnico di Milano - Dipartimento di Energia)*; Federico Pedranzini (Politecnico di Milano); Mario Motta (Politecnico di Milano)
274	M2-TS5	Tuesday, June 18th, 2023	09:00-11:00	SS - PNRR PE2: Spoke 8 Final use optimization, sustainability & resilience in energy supply chain: a right track for a greener future - 1	Real-time control of Renewable Community Energy Resources including demand response providers	Fabio Mottola (University of Naples Federico II); Daniela Proto (University of Naples Federico II)*
295	M2-TS5	Tuesday, June 18th, 2023	09:00-11:00	SS - PNRR PE2: Spoke 8 Final use optimization, sustainability & resilience in energy supply chain: a right track for a greener future - 1	Assessing Distribution Network Resilience Index with Impact Chains	Giuditta Pisano (University of Cagliari)*; Adriano Casu (University of Cagliari); Fabrizio Pilo (University of Cagliari)
344	M2-TS5	Tuesday, June 18th, 2023	09:00-11:00	SS - PNRR PE2: Spoke 8 Final use optimization, sustainability & resilience in energy supply chain: a right track for a greener future - 1	Emerging Models enabling Renewable Energy Communities in Italy	Salvatore Ruggiero (School of Engineering Science, Department of Social Sciences LUT University); Simone Franzò (please add your institution)*; Davide
25	N2-TS1	Tuesday, June 18th, 2023	11:30-13:30	Power systems and smart grids - 2	Coordinated Operation of Multi-Energy Microgrids Based on Fuzzy-Logic Control	Pablo Horrillo-Quintero (University of Cadiz)*; Pablo García-Triviño (University of Cadiz); EHSAN HOSSEINI (Cadiz University); Carlos Andrés García-Vázquez
76	N2-TS1	Tuesday, June 18th, 2023	11:30-13:30	Power systems and smart grids - 2	Economic and Technical Design Considerations for a Commercial Scale Microgrid	Ryan R Thompson (Sunbird)*; Bernard Bekker (Stellenbosch University)
88	N2-TS1	Tuesday, June 18th, 2023	11:30-13:30	Power systems and smart grids - 2	Distributed Control for a Microgrid Cluster: Implementation and Experimental Validation	David Carrasco-González (University of Cadiz)*; Raúl Sarrias-Mena (University of Cadiz); Pablo Horrillo-Quintero (University of Cadiz); EHSAN HOSSEINI (Cadiz
169	N2-TS1	Tuesday, June 18th, 2023	11:30-13:30	Power systems and smart grids - 2	A Planning Framework for On-Grid Microgrids Incorporating Green Hydrogen and Renewables	Abbas Tabandeh (University of Technology Sydney)*; Dr. Jahangir Hossain (University of Technology Sydney); kaveh khalilpour (University of Technology
205	N2-TS1	Tuesday, June 18th, 2023	11:30-13:30	Power systems and smart grids - 2	Optimal Operation of PV-integrated Reconfigurable Microgrids and Computational Burden	Seyed Farhad S.F. Zandrazavi (University of Vaasa)*; Miadreza Shafie-khah (University of Vaasa)
342	N2-TS1	Tuesday, June 18th, 2023	11:30-13:30	Power systems and smart grids - 2	Microfrontend application for microgrids monitoring and controling	Łukasz Jasiński (Wroclaw University of Science and Technology); Jacek Rezmer (Wroclaw University of Technology); Zbigniew Leonowicz (Wroclaw University of Science and Technology); Luigi Martirano (University of Rome); Michał Jasiński (Wroclaw University of Science and Technology)*
9	N2-TS2	Tuesday, June 18th, 2023	11:30-13:30	Energy efficient systems - 1	Improved wind power forecasting based on BiLSTM-BO hybrid model and data preprocessing algorithm	Reinier Herrera Casanova (Autonomous University of Nuevo León); Arturo Conde (UANL)*, Zbigniew Leonowicz (Wroclaw University of Science and
31	N2-TS2	Tuesday, June 18th, 2023	11:30-13:30	Energy efficient systems - 1	Improvement of BLDC Motor Efficiency at Low Speed Operation through Internal Wiring Configuration Switching	Carlos A. Platero (Universidad Politécnica de Madrid)*; Kumar Mahtani (Universidad Politécnica de Madrid); David Talavera (Universidad Politécnica de Madrid); Jose M. Guerrero (Universidad del País Vasco/Euskal Herriko Unibertsitatea); Maria D. López (Comunidad de Madrid); Rubén Pascual (Universidad
183	N2-TS2	Tuesday, June 18th, 2023	11:30-13:30	Energy efficient systems - 1	HVAC Submarine Cables Optimization Transmission strategies	Riccardo Loggia (Sapienza, University of Rome)*; Vincenzo Ciniello (Sapienza, University of Rome); Stefano Lauria (Sapienza University of Rome)
245	N2-TS2	Tuesday, June 18th, 2023	11:30-13:30	Energy efficient systems - 1	Reliability Of Standard Models For Operational Air Leakage Assessment In HVAC Air Systems	Federico Pedranzini (Politecnico di Milano)*; Francesco Romano (Politecnico di Milano - Dipartimento di Energia)
249	N2-TS2	Tuesday, June 18th, 2023	11:30-13:30	Energy efficient systems - 1	Enhancing Short-Term Energy Forecasting in Distributed Systems through Federated Learning	Aleksandra Zlatkova (Faculty of Electrical Engineering and Information Technologies)*; Dimitar Taskovski (Faculty of electrical engineering and information
334	N2-TS2	Tuesday, June 18th, 2023	11:30-13:30	Energy efficient systems - 1	Effect of D-STATCOMs Optimal Installment on Voltage Stability Enhancement and Total Energy Saving Cost considering Load Growth Factor using WHO	Mirna Fouad Ali (mirnaafouad@gmail.com)*; Eman H Beshr (Aastmt); Almoataz Abdelaziz (Faculty of Engineering, Ain Shams University); Mohamed Ezzat (Ain
52	N2-TS3	Tuesday, June 18th, 2023	11:30-13:30	SS - DC grids applications, technologies and protection - 2	Non-linear Control of PEM Electrolyzers in DC Microgrids	Eduardo R Vasquez Mayen (Universite catholique de Louvain (UCLouvain))*; Guy Wanlongo Ndwulu (Universite catholique de Louvain (UCLouvain)); Virginie Kluyskens (Universite catholique de Louvain (UCLouvain)); Emmanuel De Jaeger (Universite catholique de Louvain (UCLouvain))
62	N2-TS3	Tuesday, June 18th, 2023	11:30-13:30	SS - DC grids applications, technologies and protection - 2	Updates about the Horizon Europe NEWGEN Research Project for a New generation of HVDC Insulation Materials, Cables and Systems	GIOVANNI MAZZANTI (Dipartimento di Ingegneria dell'Energia Elettrica e dell'Informazione "Guglielmo Marconi" - Alma Mater Studiorum Università di Bologna)*; Mika Paajanen (VTT Technical Research Centre); Ilkka Rytoluoto (VTT Technical Research Centre); Janne Harjuhahto (Maillefer Extrusion Oy); Andrea Caprara (Techimp – Doble Engineering); Frederik Wurm (University of Twente); Kari Lahti (Tampere University); Andreas Ciroth (GreenDelta); Maya Hossam M Hussein (Florida International University)*; Mahmoud Abdelrahman (FLORIDA INTERNATIONAL UNIVERSITY); S M Sajjad Hossain Rafin (Florida International University); Ibtissam Kharchouf (Florida International University); Osama Mohammed (Florida International University)
97	N2-TS3	Tuesday, June 18th, 2023	11:30-13:30	SS - DC grids applications, technologies and protection - 2	Stability Enhancement of Hybrid AC/DC Microgrid-Based Battery/Ultracapacitor Energy Storage Systems	Giovanni Gardan (Department of Industrial Engineering - University of Padova)*; Roberto Benato (University of Padova); Luca Rusalen (University of Padova)
155	N2-TS3	Tuesday, June 18th, 2023	11:30-13:30	SS - DC grids applications, technologies and protection - 2	Impact of HVDC technology on the Probabilistic Power Flow of the Italian Power System	Luigi Colla (Prysmian)*; Davide Castelli (Prysmian)
199	N2-TS3	Tuesday, June 18th, 2023	11:30-13:30	SS - DC grids applications, technologies and protection - 2	Attenuation of traveling waves in HVDC cable lines	Luigi Coppolino (University of Naples "Parthenope"); Roberto Nardone (University of Naples "Parthenope")*; Alfredo Petruolo (University of Naples
266	N2-TS4	Tuesday, June 18th, 2023	11:30-13:30	SS - PNRR MOST Spoke 7 – Connected networks and Smart Infrastructure. Zero-carbon refuelling/recharging infrastructures and grids	Connecting the Mobility and the Refuelling/Recharging Infrastructures: The Role of Data Spaces	Giacomo Paolini (University of Bologna)*; Elisa Augello (University of Bologna); Francesca Benassi (University of Bologna); Diego Masotti (University of
292	N2-TS4	Tuesday, June 18th, 2023	11:30-13:30	SS - PNRR MOST Spoke 7 – Connected networks and Smart Infrastructure. Zero-carbon refuelling/recharging infrastructures and grids	Battery-less Microwave Wireless Sensors for Automotive Applications	Roberto Consalvi (Italferr)*
294	N2-TS4	Tuesday, June 18th, 2023	11:30-13:30	SS - PNRR MOST Spoke 7 – Connected networks and Smart Infrastructure. Zero-carbon refuelling/recharging infrastructures and grids	Innovative strategies for railway electrification	Mariagiovanna Minutillo (University of Salerno); Aniello Cappiello (University of Salerno)*; Fabiana Romano (University of Naples - Parthenope); Simona Di
299	N2-TS4	Tuesday, June 18th, 2023	11:30-13:30	SS - PNRR MOST Spoke 7 – Connected networks and Smart Infrastructure. Zero-carbon refuelling/recharging infrastructures and grids	Analysis of hydrogen demand and refueling infrastructure in the road transportation sector in Europe	Lanni (Department of Civil and Mechanical Engineering, University of Cassino and Southern Lazio)*, Gabriella Di Cicco (Department of Civil and
309	N2-TS4	Tuesday, June 18th, 2023	11:30-13:30	SS - PNRR MOST Spoke 7 – Connected networks and Smart Infrastructure. Zero-carbon refuelling/recharging infrastructures and grids	Techno-economic assessment of electrolytic hydrogen production for refuelling stations: case studies in Italy	Mechanical Engineering, University of Cassino and Southern Lazio); Viviana Cigolotti (ENEA Portici, TERIN-PSU-ABI); Massimiliano Della Pietra (ENEA R. C.
311	N2-TS4	Tuesday, June 18th, 2023	11:30-13:30	SS - PNRR MOST Spoke 7 – Connected networks and Smart Infrastructure. Zero-carbon refuelling/recharging infrastructures and grids	Optimal Design of H2 Refueling Station with On-site Hydrogen Production and Photovoltaic Generation	Pierluigi Caramia (University of Naples Parthenope)*; Antonio Bracale (University of Naples Parthenope); Pasquale De Falco (University of Napoli Parthenope);
193	N2-TS5	Tuesday, June 18th, 2023	11:30-13:30	SS - PNRR PE2 Spoke 8 Final use optimization, sustainability & resilience in energy supply chain: a right track for a greener future - 2	A knowledge graph for GIS-based operational resilience assessment of electricity networks against climate scenarios	Maria Luisa Villani (ENEA)*; Sonia Giovinazzi (ENEA); Maurizio Pollino (ENEA)
196	N2-TS5	Tuesday, June 18th, 2023	11:30-13:30	SS - PNRR PE2 Spoke 8 Final use optimization, sustainability & resilience in energy supply chain: a right track for a greener future - 2	Developing a Decision Support System for Flexibility Management in the Distribution Networks	Tommaso Bragatto ("Sapienza" University of Rome)*; Parastou Poursoltan (Sapienza); Marco Maccioni (Sapienza University of Rome); Alberto Geri (Sapienza
212	N2-TS5	Tuesday, June 18th, 2023	11:30-13:30	SS - PNRR PE2 Spoke 8 Final use optimization, sustainability & resilience in energy supply chain: a right track for a greener future - 2	Development of a methodology for assessing indoor punctual thermal comfort conditions	Marina Bonomolo (University of Palermo)*; Laura Cirrincione (Università di Palermo); Tancredi Testasecca (University of Palermo); Gianluca Scaccianoce
227	N2-TS5	Tuesday, June 18th, 2023	11:30-13:30	SS - PNRR PE2 Spoke 8 Final use optimization, sustainability & resilience in energy supply chain: a right track for a greener future - 2	NEST Task 8.5.2: Framework of the LCA model of an urban energy system	Saverio De Franceschi (Università degli Studi di Padova)*; Alessandro Manzardo (University degli Studi di Padova); Marco Jabara (Università degli Studi di
288	N2-TS5	Tuesday, June 18th, 2023	11:30-13:30	SS - PNRR PE2 Spoke 8 Final use optimization, sustainability & resilience in energy supply chain: a right track for a greener future - 2	Energy Communities as enablers of Local Token Economies: an exploratory analysis in Italy	Samuele Ferrari (Politecnico di Milano); Francesco Spinazzè (Politecnico di Milano); Davide Chianni (Politecnico di Milano)*, Gilda Massa (ENEA); Claudia
296	N2-TS5	Tuesday, June 18th, 2023	11:30-13:30	SS - PNRR PE2 Spoke 8 Final use optimization, sustainability & resilience in energy supply chain: a right track for a greener future - 2	How uncertainty affects the optimal design and operation of renewable energy communities: an Italian case study	Gabriele Volpato (Università degli Studi di Padova)*; Sergio Rech (Università degli Studi di Padova); Andrea Lazzaretto (Università degli Studi di Padova)
56	N2-PS	Tuesday, June 18th, 2023	11:30-13:30	PhD Students special session	Is selling the oxygen produced during electrolysis really a solution to make green hydrogen cheaper?	Marco Ferraro (CNR-ITAE); Fabio Massaro (University of Palermo); Eleonora Riva Sanseverino (University of Palermo); Salvatore Ruffino (University of
144	N2-PS	Tuesday, June 18th, 2023	11:30-13:30	PhD Students special session	Multi-objective procedure for optimal integration of DC microgrids in the distribution network	Francesca Marasciuolo (Politecnico di Bari)*; Maria Dicorato (Politecnico di Bari); Gioacchino Tricarico (Politecnico di Bari); Giuseppe Forte (Politecnico di Bari);
173	N2-PS	Tuesday, June 18th, 2023	11:30-13:30	PhD Students special session	Securing AGC Systems Against False Data Injection Attacks Using Federated Learning and Model Predictive Control	Masoud Babaei Vavdareh (Concordia University); Mohammad Mahdi Soleymani (Concordia University); Mohsen Ghafouri (Concordia University)*; Chadi Assi
181	N2-PS	Tuesday, June 18th, 2023	11:30-13:30	PhD Students special session	Lithium Battery Storage Degradation Analysis in LVAC Microgrid	Riccardo Loggia (Sapienza, University of Rome)*; Alessandro Flamini (Sapienza University of Rome); Alessandro Galasso (Sapienza University of Rome); Andrea Massaccesi (Sapienza, University of Rome); Roberto Menichelli (Sapienza, University of Rome); Luigi Martirano (University of Rome)
182	N2-PS	Tuesday, June 18th, 2023	11:30-13:30	PhD Students special session	A Novel MVDC Distribution Scheme for the Integration and Utilization of Renewable Energy Sources	Riccardo Loggia (Sapienza, University of Rome)*; Gabriele Galbato Muscio (Sapienza, University of Rome); Vincenzo Ciniello (Sapienza, University of Rome);
262	N2-PS	Tuesday, June 18th, 2023	11:30-13:30	PhD Students special session	AI-Driven Future of Renewable Energy	Tina Ziarati (Sapienza University of Rome)*; Sattar Hedayat (Sapienza University of Rome); Matteo Manganelli (Sapienza University of Rome); Giuseppe Sappa
284	N2-PS	Tuesday, June 18th, 2023	11:30-13:30	PhD Students special session	A Profit Optimization Model for Renewable Energy Communities based on the Distribution of Participants	Antonio Sassone (SCUOLA DI INGEGNERIA, UNIVERSITA' DELLA BASILICATA); Shoaib Ahmed (SCUOLA DI INGEGNERIA, UNIVERSITA' DELLA BASILICATA);
213	N2-PS	Tuesday, June 18th, 2023	11:30-13:30	PhD Students special session	Preliminary Results on the Impulse Breakdown Characteristics of Natural Ester Oil and Oil-Based Nanofluid with Fe2O3 Nanoparticles	Alexandros Hadjicostas (Aristotle University of Thessaloniki)*; Evangelos T Staikos (Aristotle University of Thessaloniki); George Peppas (Technical University of Crete); Zacharias G Datsios (High Voltage Laboratory, Aristotle University of Thessaloniki); George Litsardakis (Aristotle University of Thessaloniki); Eleftheria
45	M3-TS1	Wednesday, June 19th, 2023	09:00-11:00	Power systems and smart grids - 3	How 6G and AI Can Reshape the Future of Electric Systems	Aleksandr Zavodovski (University of Oulu)*; Farid Hamzehaghdam (University of Oulu); Antonio Calo (University of Oulu); Rashid Dehkordi (University of Oulu); Petr Stepanek (University of Oulu); Mehdi Rasti (University of Oulu); Eva Pongracz (University of Oulu); Petri Ahokangas (University of Oulu)
70	M3-TS1	Wednesday, June 19th, 2023	09:00-11:00	Power systems and smart grids - 3	Efficient Congestion Management: Optimizing Non-Firm Capacities for Maximized Grid Utilization	Khawaja Khalid Mehmood (Eindhoven University of Technology)*; Ranier Alexander Arruda Moura (Eindhoven University of Technology); Anne van der Molen (Eindhoven University of Technology); Reinaldo Tonkoski (Technical University of Munich); Peter van der Wielen (Eindhoven University of
87	M3-TS1	Wednesday, June 19th, 2023	09:00-11:00	Power systems and smart grids - 3	Developing Multi-Agent Wide Area Damping Controller to Mitigate False Data Injection Attacks	Masoud Babaei Vavdareh (Concordia University); Mohsen Ghafouri (Concordia University)*; Amr Ameli (Lakehead University)
95	M3-TS1	Wednesday, June 19th, 2023	09:00-11:00	Power systems and smart grids - 3	Southwest Algeria's power system flexibility enhancement considering a high share of variable renewable energy	saida makhloufi (Centre de Developpement des Energies Renouvelables)*; Mohammed Debbache (Centre de Développement des Energies Renouvelables);
98	M3-TS1	Wednesday, June 19th, 2023	09:00-11:00	Power systems and smart grids - 3	A Dynamic State Estimation Application for Stability and Uncertainty Mitigation in Smart Grids	Giancarlo Paramo (University of Florida)*; Arturo Bretas (Pacific Northwest National Laboratory)
116	M3-TS1	Wednesday, June 19th, 2023	09:00-11:00	Power systems and smart grids - 3	Adaptive Scheme for Stability Margin Estimation of Grid-connected DFIG Based Wind Turbines	Mohammad Rajabi Nasab (DEI - Polytechnic of Bari)*; Roberto Cometa (DEI - Politecnico di Bari); Sergio Bruno (DEI - Politecnico di Bari); Massimo La Scala (DEI -
269	M3-TS1	Wednesday, June 19th, 2023	09:00-11:00	Power systems and smart grids - 3	Assessing the Vulnerability of Power Systems to False Data Injection Attacks: A Bayesian Attack Graph-Based Approach	Mohammadmahdi Asghari (Lakehead University)*; Amr Ameli (Lakehead University); Mohsen Ghafouri (Concordia University); Mohammad N Uddin
42	M3-TS2	Wednesday, June 19th, 2023	09:00-11:00	Mobility	Analysis of Lithium Iron Phosphate Battery Aging in Public Transport Electric Buses	Brandon Poonah (Stellenbosch University)*; Fredrick M Mwaniki (Stellenbosch University); Johann Strauss (Stellenbosch University)
50	M3-TS2	Wednesday, June 19th, 2023	09:00-11:00	Mobility	EV Charger Introduction Planning for Airport Parking Utilizing Surplus Energy of Daytime Solar Panel	Tomoki Suzuki (The University of Tokyo)*; Kenji Tanaka (The University of Tokyo)
147	M3-TS2	Wednesday, June 19th, 2023	09:00-11:00	Mobility	Alternative powertrains for non-electrified railways: a comparative case study	Marco Antonelli (University of Pisa - DESTEC); Giovanni Lutzemberger (University of Pisa - DESTEC)*; Gianluca Pasini (University of Pisa - DESTEC); Francesco Daniele Martini (Politecnico di Milano)*; Sofia Borgosano (Politecnico di Milano); Gianluca Mongiu (Politecnico di Milano); Michela Longo (Politecnico di
160	M3-TS2	Wednesday, June 19th, 2023	09:00-11:00	Mobility	Preliminary Study of Battery Swap Stations for Electric Vehicles on Highways	Milano); Wahiba Yaici (CanmetENERGY Research Centre / Natural Resources Canada); Seyed Mahdi Miraftabzadeh (Politecnico di Milano)
194	M3-TS2	Wednesday, June 19th, 2023	09:00-11:00	Mobility	Compairing Battery and Hybrid Diesel-Battery Freight Trains for Heavy Industrial	Alessandro Ruvio (Sapienza University of Rome); Luigi Martirano (University of Rome); Alessandro Galasso (Sapienza University of Rome)*; Giovanni Vescio
238	M3-TS2	Wednesday, June 19th, 2023	09:00-11:00	Mobility	V-Cycle design of Permanent Magnet Assisted Synchronous Reluctance Machine Light Vehicle propulsion	Martis Radu (Tehnical University of Cluj-Napoca)*; Claudia Martis (Tehnical University of Cluj-Napoca); Cristina Adascalitei (Technical University of Cluj-
165	M3-TS3	Wednesday, June 19th, 2023	09:00-11:00	SS - Strategic planning and management for future transmission and distribution networks: A renewed vision	The Potential of the 36 kV Voltage Level for Distribution Networks	Elena Benedetti (Terna SpA)*; Gaia Leone (Terna); Francesco Palone (TERNA); Roberto Spezie (Terna)
231	M3-TS3	Wednesday, June 19th, 2023	09:00-11:00	SS - Strategic planning and management for future transmission and distribution networks: A renewed vision	The Energy Transition Impact on the Italian Job Market	Luigi Reatti (Abcare Energy srl); Alberto Reatti (University of Florence)*; Flavio Russo (Enel SpA)
235	M3-TS3	Wednesday, June 19th, 2023	09:00-11:00	SS - Strategic planning and management for future transmission and distribution networks: A renewed vision	Optimization-Based Restoration Strategy in a Self-Healing Distribution Network	Quoc Tuan TRAN (CEA-INES)*; Thien Phong Tran (French Alternative Energies and Atomic Energy Commission (CEA)); PHAM Minh Cong (French Alternative
277	M3-TS3	Wednesday, June 19th, 2023	09:00-11:00	SS - Strategic planning and management for future transmission and distribution networks: A renewed vision	Techno-Economic Strategies to Define Inertia Needs in Future Transmission Networks	Matteo Fresia (University of Genoa)*; Andrea Bonfiglio (University of Genoa); Renato Procopio (University of Genoa); Giuseppe Lisciandrello (Terna S.p.A.);
301	M3-TS3	Wednesday, June 19th, 2023	09:00-11:00	SS - Strategic planning and management for future transmission and distribution networks: A renewed vision	Long-Term Geospatial Planning for Renewable Energy Integration: A Comprehensive Literature Review	Chantelle Y van Staden (Stellenbosch University)*; HJ Vermeulen (Stellenbosch University); Johannes Bekker (Stellenbosch University)
307	M3-TS3	Wednesday, June 19th, 2023	09:00-11:00	SS - Strategic planning and management for future transmission and distribution networks: A renewed vision	Assessment of RoCoF Filtering in Virtual Inertia Service Provided by Large-Scale Battery Energy Storage Systems	Antonio Bracale (University of Naples Parthenope)*; Pierluigi Caramia (University of Naples Parthenope); Pasquale De Falco (University of Napoli Parthenope);
268	M3-TS4	Wednesday, June 19th, 2023	09:00-11:00	Maintenance, operation, and safety	Temperature Influence in Frequency Response Analysis for Transformer Oil Condition Monitoring	Abel Dominguez (Universidad Politécnica Madrid); Carlos A. Platero (Universidad Politécnica de Madrid); Kumar Mahtani (Universidad Politécnica de Madrid);
69	M3-TS4	Wednesday, June 19th, 2023	09:00-11:00	Maintenance, operation, and safety	Verification of the Absence of Voltage	Sergio Panetta (I-Gard Corp)*
94	M3-TS4	Wednesday, June 19th, 2023	09:00-11:00	Maintenance, operation, and safety	Copper Conductor Thefts of Earthing Systems of High Voltage Transmission Lines: A Case Study in Halfaya Oil Field	Sherif M. Ismael (Facilities and Construction Department PetroChina International FZE Iraq Missan, Iraq); Zheng Ghang (Facilities and Construction Department PetroChina International FZE Iraq Missan, Iraq); Shady H. E. Abdel Aleem (Department of Electrical Engineering Institute of Aviation Engineering
162	M3-TS4	Wednesday, June 19th, 2023	09:00-11:00	Maintenance, operation, and safety	The impact of climate change on ground clearance and high voltage overhead lines discharge risk	Francesco Palone (TERNA)*; Gaia Leone (Terna); piero berardi (terna); giovanni pirovano (rse); alberto piccinin (Terna); roberto spezie (terna); Lorenzo Papi Zacharias G Datsios (High Voltage Laboratory, Aristotle University of Thessaloniki)*; Diamantis G. Patsalis (High Voltage Laboratory, Aristotle University of
168	M3-TS4	Wednesday, June 19th, 2023	09:00-11:00	Maintenance, operation, and safety	Application of Non-Gapped Line Arresters to 150 kV and 400 kV Overhead Lines: Effects of AC Voltage at the Instant of Direct Lightning Strike	Thessaloniki); Pantelis Mikropoulos (Aristotle University of Thessaloniki); Thomas Tsovilis (High Voltage Laboratory, Aristotle University of Thessaloniki)
264	M3-TS4	Wednesday, June 19th, 2023	09:00-11:00	Maintenance, operation, and safety	Smart Tests for Medium Voltage Cables in Renewable Energy Plants	Gianfranco Di Lorenzo (Sapienza University of Rome); Erika Stracqualursi (Sapienza University of Rome)*; Rodolfo Araneo (Sapienza University of Rome)*;
308	M3-TS4	Wednesday, June 19th, 2023	09:00-11:00	Maintenance, operation, and safety	Parallel connection of different UPS units for operation, maintenance and reliability improvement	Leonardo Baleani (Dept. of Astronautics, Electrical & Energetic Engn); Stefano Elia (Dept. of Astronautics, Electrical & Energetic Engn); Chiara Boccaletti (Dept.
273	M3-TS5	Wednesday, June 19th, 2023	09:00-11:00	SS - Innovative electrical applications for energy efficiency in buildings and industrial processes - 1	Evaluating the Energy and Economic Impacts of a Geothermal Heat Pump installation in Italy	Leonardo Leoni (University of Florence)*; Saverio Ferraro (University of Florence); Fabrizio Martini (Italian National Agency for New Technologies, Energy and Sustainable Economic Development (ENEA)); Christian Ferrante (Italian National Agency for New Technologies, Energy and Sustainable Economic Development
280	M3-TS5	Wednesday, June 19th, 2023	09:00-11:00	SS - Innovative electrical applications for energy efficiency in buildings and industrial processes - 1	Cost, energy efficiency, and environmental impact analysis of orange juice pasteurization: comparing pulsed electric fields with traditional thermal treatment	Giovanni Landi (Enea)*; Miriam Benedetti (ENEA); Elham Eslami (Salerno University); Giovanna Ferrari (Salerno University); Gianpiero Pataro (Department of
283	M3-TS5	Wednesday, June 19th, 2023	09:00-11:00	SS - Innovative electrical applications for energy efficiency in buildings and industrial processes - 1	A framework for a participative WEB based tool to define energy retrofit potential and local end use profiles in order to face energy poverty phenomena	Eusebio Antonio Loria (Sotacarbo)*; Stefano Pili (Nordai); Francesca Poggi (Sotacarbo)
293	M3-TS5	Wednesday, June 19th, 2023	09:00-11:00	SS - Innovative electrical applications for energy efficiency in buildings and industrial processes - 1	Economic and environmental impact analysis of innovative electrical peeling methods in the tomato processing industry	Giovanni Landi (Enea); Miriam Benedetti (Energy Efficiency Unit Department ENEA); Elhami Eslami (Department of Industrial Engineering, University of Salerno); Giovanna Ferrari (Department of Industrial Engineering, University of Salerno); Gianpiero Pataro (Department of Industrial Engineering, University of
297	M3-TS5	Wednesday, June 19th, 2023	09:00-11:00	SS - Innovative electrical applications for energy efficiency in buildings and industrial processes - 1	Graphene-based organic polymer composites for improved thermoelectric properties near room temperature	Andrea Reale (Electronic Eng. Dept. - University of Rome Tor Vergata)*
305	M3-TS5	Wednesday, June 19th, 2023	09:00-11:00	SS - Innovative electrical applications for energy efficiency in buildings and industrial processes - 1	Low temperature carbon electrodes for low light performing perovskite solar cells	Luigi Vesce (University of Rome "Tor Vergata")*; Zohair Abbas (University of Rome Tor Vergata); Maurizio Stefanelli (University of Rome "Tor Vergata"); Suresh Podapangi (University of Rome "Tor Vergata"); Aldo Di Carlo (CHOSE - Dept. Electr. Eng. University of Rome
57	N3-TS1	Wednesday, June 19th, 2023	11:30-13:30	SS - Electrolyte & Electrode membranes for electrochemical energy storage devices	Dynamic Response Analysis of Alkaline and PEM Electrolyzers in Low-Inertia Power Systems: A Comparative Study	Seyyed Mahyar Tofighi milani (Aalto university)*; Sajjad Fattaheian-Dehkordi (Aalto university); Matti Lehtonen (Aalto University Finland)
268	N3-TS1	Wednesday, June 19th, 2023	11:30-13:30	SS - Electrolyte & Electrode membranes for electrochemical energy storage devices	Prominent Progress in Polysulfone-Based Anion Exchange Membrane Fabrication by Electrospinning	Somayyeh Rakhshani (Sapienza university of Rome)*
320	N3-TS1	Wednesday, June 19th, 2023	11:30-13:30	SS - Electrolyte & Electrode membranes for electrochemical energy storage devices	A smart large-scale synthesis of Na1.0Li0.2Ni0.25Mn0.75O2 as cathode for Na-ion batteries	Claudia Paoletti (ENEA)*; Livia Della Seta (ENEA); Pier Paolo Prosini (ENEA)
346	N3-TS1	Wednesday, June 19th, 2023	11:30-13:30	SS - Electrolyte & Electrode membranes for electrochemical energy storage devices	Explorative Approaches for Safer, Scalable, Lithium Battery Solid Electrolyte Technologies	Eleonora de Santis (ENEA (TERIN-DEC-ACEL)); Sara Bergamasco (Nanofaber srl); Antonio Rinaldi (ENEA (TERIN-DEC-ACEL),); Rodolfo Araneo (Sapienza
27	N3-TS2	Wednesday, June 19th, 2023	11:30-13:30	Power electronics and components - 1	Ground Fault Location Method for DC/DC Converters	Aitor Blázquez-Campanon (Universidad del País Vasco/Euskal Herriko Unibertsitatea); Jesus Mauricio Pérez-García (Universidad del País Vasco/Euskal Herriko Unibertsitatea); Kumar Mahtani (Universidad Politécnica de Madrid); Pablo Eguia (Universidad del País Vasco/Euskal Herriko Unibertsitatea); Jose M. Guerrero
55	N3-TS2	Wednesday, June 19th, 2023	11:30-13:30	Power electronics and components - 1	A High Gain Single-Switch DC-DC Converter Based on Cascaded Boost	Hossein Gholizadeh (Shahid Beheshti University); Niloufar DIZANGIAN (Université de Lorraine, CNRS, IJL, F-54000 Nancy, France); Philippe Poure (please add
58	N3-TS2	Wednesday, June 19th, 2023	11:30-13:30	Power electronics and components - 1	On Small-Signal Modelling of Advanced Phase-Locked Loops for Three-phase Grid-connected Applications	Saeed Golestan (Aalborg University)*; Ali Akhavan (Aalborg University); Juan C. Vasqurz (Aalborg University)
96	N3-TS2	Wednesday, June 19th, 2023	11:30-13:30

304	N3-TS5	Wednesday, June 19th, 2023	11:30-13:30	SS - Innovative electrical applications for energy efficiency in buildings and industrial processes - 2	Enhancing SME Energy Management: Development of an Assessment Tool to Identify Improvement Opportunities and Support their Implementation	Annalisa Santolamazza (Tor Vergata University of Rome)*; Vito Introna (Tor Vergata University of Rome); Fabrizio Martini (Italian National Agency for New
336	N3-TS5	Wednesday, June 19th, 2023	11:30-13:30	SS - Innovative electrical applications for energy efficiency in buildings and industrial processes - 2	Designing a platform for energy recovery and monitoring in buildings applications	Luca La Notte (ENEA)*; Giovanni Landi (Enea); Alessandro Lorenzo Palma (ENEA); Paolo Sdringola (ENEA); Guerino Avallone (University of Salerno); Carlo
220	A3-TS1	Wednesday, June 19th, 2023	15:00-17:00	Renewable energy sources and storage- 3	Optimal Operation of Hybrid Energy Systems in the Presence of Electric Vehicle Load Uncertainties	Fatima Raeisi (Macquarie University)*
222	A3-TS1	Wednesday, June 19th, 2023	15:00-17:00	Renewable energy sources and storage- 3	A Design Optimisation of Green Hydrogen Production in South Africa Using Concentrated Solar-Thermal Power	Tsepile T Malemane (University of Stellenbosch)*; Karen Garner (University of Stellenbosch)
225	A3-TS1	Wednesday, June 19th, 2023	15:00-17:00	Renewable energy sources and storage- 3	A Review on Methods for Long-Term Forecasting of RES Installed Capacity	Elena Benedetti (La Sapienza University of Rome)*; Maria Carmen Falvo (University of Rome Sapienza); Vitantonio Di Dio (Terna Rete Italia)
244	A3-TS1	Wednesday, June 19th, 2023	15:00-17:00	Renewable energy sources and storage- 3	Innovative Solutions Addressing South Africa's Energy Paradox: Integrating Renewable Energy Resources for Increased Grid Stability and Maintenance Schedule Planning	Francisca M Daniel-Durandt (Stellenbosch University)*; Chantelle Y van Staden (Stellenbosch University); Arnold J Rix (Stellenbosch University); Bernard
275	A3-TS1	Wednesday, June 19th, 2023	15:00-17:00	Renewable energy sources and storage- 3	Data-driven Optimal Scheduling of Isolated Microgrid Using Random Forest Regressor	Seyed Farhad S.F. Zandrazavi (University of Vaasa)*; Miadreza Shafie-khah (University of Vaasa); Meysam Pashaei (University of Vaasa)
276	A3-TS1	Wednesday, June 19th, 2023	15:00-17:00	Renewable energy sources and storage- 3	Real-time Model Predictive Control for Techno-Economical Battery Management in Distributed Power Grids Using Day-Ahead Optimization	Fatemeh Shojaei (RMIT University)*; Arash Vahidnia (RMIT University); Ali Moradi Amani (RMIT University)
18	A3-TS2	Wednesday, June 19th, 2023	15:00-17:00	Energy efficient systems - 2	Optimal Sizing Algorithm of PV-BESS Systems Considering a Price-Driven Rule-Based Energy Management Strategy	Luis Luengo-Baranguan (CIRCE Technology Centre)*; Marcos Remiro-Cinca (CIRCE Technology Centre); David Rivas-Ascaso (CIRCE Technology Centre); Roberto Rocca (CIRCE Technology Centre); Gregorio Fernandez (CIRCE Technology Centre); Lorena Elorza-Uriarte (CIRCE Technology Centre)
49	A3-TS2	Wednesday, June 19th, 2023	15:00-17:00	Energy efficient systems - 2	Optimal Energy Management System for StorageIntegrated Multi-Energy Microgrids	EHSAN HOSSEINI (Cadiz University)*; Pablo Horrillo-Quintero (University of Cadiz); Pablo García-Triviño (University of Cadiz); Carlos Andrés García-Vázquez
190	A3-TS2	Wednesday, June 19th, 2023	15:00-17:00	Energy efficient systems - 2	Development of Intelligent Models for Building Energy Management	Reza Abbas (Politecnico di Milano); Morris Brenna (Politecnico di Milano); Alessandro Saldarini (Politecnico di Milano); Roberto La Capruccia (FANTINI COSMI Giacomo Bruni (Dipartimento Unità Efficienza Energetica ENEA , Roma); Antonio D'Angola (SCUOLA DI INGEGNERIA, UNIVERSITA' DELLA BASILICATA)*; Antonio
313	A3-TS2	Wednesday, June 19th, 2023	15:00-17:00	Energy efficient systems - 2	ATENEA4SME: a tool for self-evaluation of energy efficiency and audit support in industrial SMEs	Ferraro (University Of Basilicata); Milena Marrocoli (SCUOLA DI INGEGNERIA, UNIVERSITA' DELLA BASILICATA); Chiara Martini (Dipartimento Unità Efficienza Energetica ENEA , Roma); Marcello Salvio (Dipartimento Unità Efficienza Energetica ENEA , Roma); Antonio Telesca (SCUOLA DI INGEGNERIA, UNIVERSITA'
84	A3-TS3	Wednesday, June 19th, 2023	15:00-17:00	SS - Application of machine learning in power systems	Deep Neural Networks for Identifying Modes of Transport using GPS Data	seyedhassan hosseini (Sapienza University of Rome); guido gentile (Sapienza University of Rome); lory michelle Bresciani Miristice (Sapienza University of
118	A3-TS3	Wednesday, June 19th, 2023	15:00-17:00	SS - Application of machine learning in power systems	Representative Time-series Scenarios of Residential Power Demand, Electric Vehicle Charging, and Solar Photovoltaic Generation Based on Unsupervised Learning Algorithms	Gustavo Aschidamini (Simon Fraser University)*; Amir Shabani (Simon Fraser University); Bradley Reinholz (Generac Power Systems Inc.); Malcolm Metcalfe
127	A3-TS3	Wednesday, June 19th, 2023	15:00-17:00	SS - Application of machine learning in power systems	Structurally Tuned LSTM Networks to Nowcast Photovoltaic Power Production	Alice La Fata (University of Genoa - DITEN)*; Muhammad Asim Amin (University of Genoa - DITEN); Marco Invernizzi (University of Genoa - DITEN); Renato Wassila TERCHA (University of boumerdes); Sid Ahmed TADJER (UNIVERSITE M'HAMED BOUGARA); Fathia Chekired (Unité de Développement des
259	A3-TS3	Wednesday, June 19th, 2023	15:00-17:00	SS - Application of machine learning in power systems	First step in Real-Time Energy Management: Forecasting Energy Production using Machine Learning Models	Equipements Solaires, UDES, Centre de Développement des Energies Renouvelables, CDER); Laurent Canale (LAPLACE Lab., CNRS, Université Toulouse III - Paul
326	A3-TS3	Wednesday, June 19th, 2023	15:00-17:00	SS - Application of machine learning in power systems	Adaptive SOC Estimation for Lithium-Ion Batteries Using Cluster-Based Deep Learning Models Across Diverse Temperatures	Mohammed Khalifa Amur Al-Alawi (Canterbury Christ Church University)*; James Cugley (Canterbury Christ Church University); Hany Hassanin (Canterbury
332	A3-TS3	Wednesday, June 19th, 2023	15:00-17:00	SS - Application of machine learning in power systems	Clustering Spatiotemporal Wind Power for Pattern Analysis in South Africa	Lise M Prinsloo (Stellenbosch University)*; Chantelle Y van Staden (Stellenbosch University)
30	A3-TS4	Wednesday, June 19th, 2023	15:00-17:00	SS - Electrical challenges in energy communities	Electromagnetic Interferencies in Power Networks	Tetiana Serdiuk (Ukrainian State University of Science and Technologies)*; Kseniia Serdiuk (Ukrainian State University of Science and Technologies); Ivan
53	A3-TS4	Wednesday, June 19th, 2023	15:00-17:00	SS - Electrical challenges in energy communities	Energy Management Strategy for Renewable Energy Community: A Case Study	Bianca G Magalhães (University of Beira Interior)*; José Pombo (UBI); Maria Rosario (UBI); Silvio Mariano (UBI); Miguel Louro (E-REDES)
104	A3-TS4	Wednesday, June 19th, 2023	15:00-17:00	SS - Electrical challenges in energy communities	Optimal Power Dispatch and Load Scheduling for Fuel Cell Community Using ADMM	Leehter Yao (National Taipei U. of Tech.)*; J. C. Teo (National Technology University Taipei)
115	A3-TS4	Wednesday, June 19th, 2023	15:00-17:00	SS - Electrical challenges in energy communities	Impact of power consumption at various aggregation levels in REC analysis: a real case study perspective	Valentina Consolo (Università di Pisa)*; Roberto Rugani (University of Pisa, DESTeC Department); Elena Mura (IUSS Pavia); marco raugi (DESTEC Dep, University
166	A3-TS4	Wednesday, June 19th, 2023	15:00-17:00	SS - Electrical challenges in energy communities	Optimizing Renewable Energy Community Management through Multi-Objective Approaches	Dimitri Thomopulos (University of Pisa)*; Claudia D'Ambrosio (CNRS, Ecole Polytechnique); marco raugi (DESTEC Dep, University of Pisa)
291	A3-TS4	Wednesday, June 19th, 2023	15:00-17:00	SS - Electrical challenges in energy communities	Models and Methods for Sustainable Road Tunnels Operating as Microgrid and RES Energy Community	Antonio Bracale (University of Naples Parthenope)*; Pierluigi Caramia (University of Naples Parthenope); Enrico Carpaneto (Politecnico di Torino); Giovanni Mercurio Casolino (Università degli Studi di Cassino e del Lazio Meridionale); Pasquale De Falco (University of Napoli Parthenope); Angela Russo (Politecnico
201	A3-TS5	Wednesday, June 19th, 2023	15:00-17:00	SS - Integration of renewable energy sources and electric mobility systems: Advances in modelling, planning and operational management	Smart grid solution for fast power system balancing	Zoran Bunčec (HOPS Plc.)*; Ana Kekelj (HOPS Plc.); Igor Ivankovic (Croatian Transmission System Operator Ltd); Dejan Livić (HOPS Plc.); Renata Rubeša (HOPS
230	A3-TS5	Wednesday, June 19th, 2023	15:00-17:00	SS - Integration of renewable energy sources and electric mobility systems: Advances in modelling, planning and operational management	Impact of Reservation on the Performance of Optimal Control in Electric Vehicles Fast Charging Stations	Emanuele De Santis (Sapienza University of Rome)*; Francesco Liberati (Sapienza University of Rome); Alessandro Di Giorgio (University of Rome "La
239	A3-TS5	Wednesday, June 19th, 2023	15:00-17:00	SS - Integration of renewable energy sources and electric mobility systems: Advances in modelling, planning and operational management	Energy Management System for Optimal Operation of a Prosumer with Renewable Generation and Electric Vehicle Fleet with Vehicle-to-Building	Matteo Fresia (University of Genoa)*; Miguel de-Simón-Martín (Universidad de León); Stefano Bracco (University of Genoa-Savona)
252	A3-TS5	Wednesday, June 19th, 2023	15:00-17:00	SS - Integration of renewable energy sources and electric mobility systems: Advances in modelling, planning and operational management	Energy Management System for the Operation of an Electric Vehicle Charging Hub fed by Solar and Wind Energy Sources	Alphonse Francis (University of Genoa)*; Matteo Fresia (University of Genoa); Stefano Bracco (University of Genoa-Savona); Edoardo Barabino (FERA srl)
327	A3-TS5	Wednesday, June 19th, 2023	15:00-17:00	SS - Integration of renewable energy sources and electric mobility systems: Advances in modelling, planning and operational management	Evaluation of Grid Harmonic Disturbances Injected by DC Electric Vehicle Charging Stations	Giorgio Benedetto (politecnico di torino); Ettore Bompard (Politecnico di Torino); Samuele Guglielmi (Politecnico di Torino); Andrea Mazza (Politecnico di Torino)*; Enrico Pons (Politecnico di Torino); Paolo Tosco (Edison SpA); Marco Zampolli (Edison SpA); Remi Jaboeuf (Edison SpA)
339	A3-TS5	Wednesday, June 19th, 2023	15:00-17:00	SS - Integration of renewable energy sources and electric mobility systems: Advances in modelling, planning and operational management	K-mean algorithm to support energy future decision for household with PV and EV	Michał Jasiński (Wroclaw University of Science and Technology)*; Elżbieta Jasińska (Wroclaw University of Science and Technology); Zbigniew Leonowicz (Wroclaw University of Science and Technology); Marek Jasiński (WWSIS „Horyzont"); Miroslava Gono (VSB Technical University of Ostrava); Luigi Martirano
8	M4-TS1	Thursday, June 20th, 2023	09:00-11:00	Materials	Lightning Impulse Breakdown Voltage of Natural Ester Oil-Based Nanofluids with Fe2O3 Nanoparticles	Evangelos T Staikos (Aristotle University of Thessaloniki)*; Alexandros Hadjicostas (Aristotle University of Thessaloniki); Pavlos Samaras (Aristotle University of Thessaloniki); George Peppas (Technical University of Crete); Vasileios Zagkanas (Aristotle University of Thessaloniki); Zacharias G Datsios (High Voltage
28	M4-TS1	Thursday, June 20th, 2023	09:00-11:00	Materials	Dielectric Performance of Vegetable Oil-Based Nanofluid After Long-Time Aging	Konstantinos Koutras (University of Patras)*; Georgios Peppas (University of Patras); Ioannis Gonos (National Technical University of Athens); Eleftheria
138	M4-TS1	Thursday, June 20th, 2023	09:00-11:00	Materials	Plastic recycling via catalytic pyrolysis for energy generation	Ali Raza (NUST); Asif Khoja (NUST); Abeera Ayaz Ansari (NUST)*; Salman Raza Naqvi (Karlstad University); Waqar Ul Habib Khan (NUST); Kinza Rizwan (NUST); Gianfranco Di Lorenzo (Sapienza University of Rome)*; Erika Stracqualursi (Sapienza University of Rome); Rodolfo Araneo (Sapienza University of Rome);
265	M4-TS1	Thursday, June 20th, 2023	09:00-11:00	Materials	A New Technology for Termite-Proof Underground Cables	Riccardo Cecere (Enel Green Power and Thermal Generation); Paolo Audisio (Sapienza University of Rome); Elisabetta Bragagni Capaccini (Tratos Cavi S.p.A.)
317	M4-TS1	Thursday, June 20th, 2023	09:00-11:00	Materials	New Design of Multilayer Microwave Absorbing Structures Using Ceramic/CNT Slabs for X-Band Frequencies	Karim Benzaoui (Laboratory Electromagnetic Compatibility, Ecole Militaire Polytechnique)*; Youcef Amine MEDJAOURI (Ecole Militaire Polytechnique); Achour ALES (Electromagnetic Compatibility Laboratory , Ecole Militaire Polytechnique, BP 17 Bordj El-Bahri 16111 Algiers, Algeria); redouane TAHMI (Ecole
103	M4-TS2	Thursday, June 20th, 2023	09:00-11:00	SS - Bio-inspired algorithms applied to power and energy conversion systems	Improving Short-Term Load Forecasting Accuracy with Random Forest Method Optimized by Bio-Inspired Particle Swarm Optimization Algorithm	Bianca G Magalhães (University of Beira Interior)*; José Pombo (UBI); Maria Rosario (UBI); Silvio Mariano (UBI); Miguel Louro (E-REDES)
124	M4-TS2	Thursday, June 20th, 2023	09:00-11:00	SS - Bio-inspired algorithms applied to power and energy conversion systems	A novel multi-swarm and multi-objective optimization algorithm for solving engineering problems	João Pedro Faria (Institute of Telecomunications)*; Carlos Marques (University of Beira Interior); José Pombo (UBI); Silvio Mariano (UBI); Maria Rosario (UBI)
195	M4-TS2	Thursday, June 20th, 2023	09:00-11:00	SS - Bio-inspired algorithms applied to power and energy conversion systems	Solar Grid Tied Inverters: configuration, topologies, and control strategies	João Pedro Faria (Institute of Telecomunications)*; José Pombo (UBI); Maria Rosario (UBI); Silvio Mariano (UBI)
250	M4-TS2	Thursday, June 20th, 2023	09:00-11:00	SS - Bio-inspired algorithms applied to power and energy conversion systems	Photovoltaic power estimation of a polycrystalline silicon module under partial shading	H.G.G. Nunes (University of Beira Interior)*; José Pombo (UBI); Silvio Mariano (UBI); Maria Rosario (UBI)
251	M4-TS2	Thursday, June 20th, 2023	09:00-11:00	SS - Bio-inspired algorithms applied to power and energy conversion systems	A novel hybrid MPPT method based on particle swarm optimization and P&O assisted by spline interpolation tecnique	H.G.G. Nunes (University of Beira Interior)*; Filipe Teixeira (UBI); José Pombo (UBI); Silvio Mariano (UBI); Maria Rosario (UBI)
256	M4-TS2	Thursday, June 20th, 2023	09:00-11:00	SS - Bio-inspired algorithms applied to power and energy conversion systems	A modified Harris Hawks Optimization algorithm for solving the optimal power flow problem	P.M.R. Bento (University of Beira Interior)*; José Pombo (UBI); Maria Rosario (UBI); Silvio Mariano (UBI)
306	M4-TS2	Thursday, June 20th, 2023	09:00-11:00	SS - Bio-inspired algorithms applied to power and energy conversion systems	Parameter estimation of lithium-ion batteries using GSKPSO hybrid method based on impedance data	H.G.G. Nunes (University of Beira Interior)*; José Pombo (UBI); Silvio Mariano (UBI); Maria Rosario (UBI)
34	M4-TS3	Thursday, June 20th, 2023	09:00-11:00	Power electronics and components - 2	Ground Fault Detection Method for Electric Systems with Partial Power Converters	Jose M. Guerrero (Universidad del País Vasco/Euskal Herriko Unibertsitatea)*; Jon Anzola (Mondragon Unibertsitatea); Carlos A. Platero (Universidad
83	M4-TS3	Thursday, June 20th, 2023	09:00-11:00	Power electronics and components - 2	Dynamic interactions of a high-current thyristor-rectifier interfaced PEM electrolyser with the angular dynamics of synchronous machines	Eduardo R Vasquez Mayen (Universite catholique de Louvain (UCLouvain))*; Guy Wanlongo Ndiwulu (Universite catholique de Louvain (UCLouvain)); Seyed Saeid Heidari Yazdi (Nazarbayev University)*; Sadjad Shafiei (Nazarbayev university); Adilkhan Kapanov (Nazarbayev university); Mostafa Kermani
192	M4-TS3	Thursday, June 20th, 2023	09:00-11:00	Power electronics and components - 2	Analyzing Sea Environment's Effects on Inductive Power Transfer Systems: Equivalent Circuit Parameters and Performance Analysis	(SAPIENZA University); Amin Hajizadeh (Aalborg University); Mehdi Bagheri (Electrical and Computer Engineering Department, Nazarbayev University)
229	M4-TS3	Thursday, June 20th, 2023	09:00-11:00	Power electronics and components - 2	Optimizing Power Integration: Interleaved DC-DC Converters in a Fuel cell-Battery-Supercapacitor Hybrid System	Syeda Shafia Zehra (Politecnico di Milano)*; Alberto Dolara (Politecnico di Milano); Francesco Grimaccia (Politecnico di Milano); Marco Mussetta (Politecnico
241	M4-TS3	Thursday, June 20th, 2023	09:00-11:00	Power electronics and components - 2	Supercapacitor Characterization Over a Wide Current Range	Sabino Pipolo (ENEA)*; Alessandro Lampasi (ENEA Frascati); Francesco Desana (University of Tuscia); Emiliano Guerra (University of Bologna); Simone Minucci
328	M4-TS3	Thursday, June 20th, 2023	09:00-11:00	Power electronics and components - 2	A Triple-Active Bridge Based Solid State Transformer Fast Charging Station Topology For Electric Vehicles	mohamed Taha Gabriel (EJUST)*; Diaa-Eldin Manosur (EJUST); MASAHITO SHOYAMA (Kyushu University); Sobhy abdelkader (EJUST)
337	M4-TS3	Thursday, June 20th, 2023	09:00-11:00	Power electronics and components - 2	Flexibility Potential from Inverter-Based Generators in a 2030 Italian Scenario	Silvia Canevese (Ricerca sul Sistema Energetico - RSE)*; Antonio Gatti (RSE SpA)
80	M4-TS4	Thursday, June 20th, 2023	09:00-11:00	SS - Impact of topology and soil properties on grounding systems performance: modelling and simulation of transients	Impact of Sequence Parameters in the Frequency Domain: Utilizing Physically Consistent Line Parameters	Jaimis Leon (Unicamp)*; Jesus Guevara (Unicamp); Sérgio Kurokawa (Unesp); Jose Pissolato (Unicamp)
335	M4-TS4	Thursday, June 20th, 2023	09:00-11:00	SS - Impact of topology and soil properties on grounding systems performance: modelling and simulation of transients	Overvoltages and Critical Backflashover Current of a 150 kV Overhead Line: Influence of Lightning Current Waveform and Tower Grounding System Modeling	Diamantis G. Patsalis (Aristotle University of Thessaloniki); Zacharias G Datsios (High Voltage Laboratory, Aristotle University of Thessaloniki); Erika Stracqualursi (Sapienza University of Rome); Rodolfo Araneo (Sapienza University of Rome); Pantelis Mikropoulos (Aristotle University of Thessaloniki);
341	M4-TS4	Thursday, June 20th, 2023	09:00-11:00	SS - Impact of topology and soil properties on grounding systems performance: modelling and simulation of transients	Equipotential Bonding of Photovoltaic Systems	Massimo Mitolo (Irvine Valley College)*; Gianfranco Di Lorenzo (Sapienza University of Rome); Erika Stracqualursi (Sapienza University of Rome); Rodolfo
345	M4-TS4	Thursday, June 20th, 2023	09:00-11:00	SS - Impact of topology and soil properties on grounding systems performance: modelling and simulation of transients	GEA Simulator: Power Frequency and Transient Simulations for Practical Applications	Erika Stracqualursi (Sapienza University of Rome)*; Rodolfo Araneo (Sapienza University of Rome)
136	M4-TS5	Thursday, June 20th, 2023	09:00-11:00	SS - Novel methodologies, models, solutions for resilient and secure smart grids and multi-vectors networks	An innovative methodology for evaluating power system adequacy, integrating analyses of both the reliability and anomalous behaviour of components.	Roberto Ciavarella (ENEA)*; Amedeo Buonanno (ENEA, Department of Energy Technologies and Renewable Energy Sources); Maria Valenti (ENEA); gianluca
161	M4-TS5	Thursday, June 20th, 2023	09:00-11:00	SS - Novel methodologies, models, solutions for resilient and secure smart grids and multi-vectors networks	Hydrogen-Blended Natural Gas in a Distribution Network - An Italian Case Study Analysis	Ben Alex Baby (University of Palermo)*; Yifei Lu (Forschungszentrum Jülich); Andrea Benigni (Forschungszentrum Jülich); Santi Bonanno (AMG Energia S.p.A); Marco Ferraro (CNR-ITAE); Germana Poma (AMG Energia S.p.A); Marco Beccali (Università di Palermo - Dipartimento di Ingegneria)
203	M4-TS5	Thursday, June 20th, 2023	09:00-11:00	SS - Novel methodologies, models, solutions for resilient and secure smart grids and multi-vectors networks	Risk Assessment in Low Voltage Distribution Networks	Tommaso Bragatto (Sapienza University of Rome); Fabio Massimo Gatta (Sapienza University of Rome); Alberto Geri (Sapienza University of Rome); Marco Maccioni (Sapienza University of Rome)*; Ludovico Nati (Areti S.p.A.); Alessandro Palazzoli (Areti S.p.A.); Paolo Sancioni (Areti S.p.A.)
224	M4-TS5	Thursday, June 20th, 2023	09:00-11:00	SS - Novel methodologies, models, solutions for resilient and secure smart grids and multi-vectors networks	Integration of FDIR Practices in Distribution Optimal Network Reconfiguration Routines	Roberto Cometa (DEI - Politecnico di Bari)*; Mohammad Rajabi Nasab (DEI - Polytechnic of Bari); Francesco Lorusso (DEI - Polytechnic of Bari); Angelo Velini
281	M4-TS5	Thursday, June 20th, 2023	09:00-11:00	SS - Novel methodologies, models, solutions for resilient and secure smart grids and multi-vectors networks	Preliminary design of a Carbon Neutral Energy Hub to Integrate in a Digital Twin	Salvatore Fabozzi (ENEA)*; Antonio Picarelli (ENEA); Maria Valenti (ENEA); Walter Gaggioli (ENEA); Giorgio Graditi (ENEA)
302	M4-TS5	Thursday, June 20th, 2023	09:00-11:00	SS - Novel methodologies, models, solutions for resilient and secure smart grids and multi-vectors networks	Innovative small co-generative CSP plants based on molten salts technology	Salvatore Fabozzi (ENEA)*; Giorgio Graditi (ENEA); Walter Gaggioli (ENEA); Giuseppe Petroni (ENEA); Primo Di Ascenzi (ENEA); Maria Valenti (ENEA) Marco Menga (DEI - Politecnico di Bari)*; Francesco Lorusso (DEI - Politecnico di Bari); Cosimo Iurlaro (DEI - Politecnico di Bari); Massimo La Scala (DEI -
331	M4-TS5	Thursday, June 20th, 2023	09:00-11:00	SS - Novel methodologies, models, solutions for resilient and secure smart grids and multi-vectors networks	Control of a PV-Electrolyzer-Fuel Cell Microgrid for the Provision of Grid Services in Distribution Systems	Politecnico di Bari); Giovanna Adinolfi (ENEA -Italian National Agency for New Technologies, Energy and Sustainable Economic Development-); Sergio Bruno
121	N4-TS1	Thursday, June 20th, 2023	11:30-13:30	SS - Technologies for health	A Computerized Multimodal Gallery for the Smart Management of Human Emotions	Ilaria Di Pompeo (University of L'Aquila); Giulia D'Aurizio (University of L'Aquila); Giuseppe Curcio (University of L'Aquila); Chiara Burattini (Sapienza
122	N4-TS1	Thursday, June 20th, 2023	11:30-13:30	SS - Technologies for health	App "Solare": Application functional specification	Mauro Antico (Philmark Informica SPA)*; Fabio Bisegna (Universita degli studi di Roma Sapienza); Alessandro Passamonte (Philmark Informica SPA); Paolo
129	N4-TS1	Thursday, June 20th, 2023	11:30-13:30	SS - Technologies for health	Noise risk assessment in hospital sterilization units	Francesco Leccese (University of Pisa); Michele Rocca (University of Pisa); Giacomo Salvadori (University of Pisa - DESTeC Department)*; Alessandro Merlino
143	N4-TS1	Thursday, June 20th, 2023	11:30-13:30	SS - Technologies for health	Sun exposure and Vitamin D synthesis: a first look inside the usefulness of mobile Apps	Roberta Pozzi (Istituto Superiore di Sanità)*; Sandra Morelli (ISS); Rosa Lasaponara (CNR-IMAA); Alessandro Polichetti (ISS); Fabio Bisegna (Universita degli Luís Lapão (NOVA University of Lisbon); Mélanie Maia (NOVA University of Lisbon); ALBERTO MODENESE (University of Modena & Reggio Emilia); Maria Miguel
167	N4-TS1	Thursday, June 20th, 2023	11:30-13:30	SS - Technologies for health	SUN@METHIS: Implementing a dashboard for comprehensive solar ultraviolet radiation risk management at Municipality level	Castela Batista Dias Santos (NOVA University of Lisbon)*; Jorge Barroso-Dias (Departamento de Saúde, Higiene e Segurança, Câmara Municipal de Lisboa);
171	N4-TS1	Thursday, June 20th, 2023	11:30-13:30	SS - Technologies for health	Managing the use of light in health care facilities	Francesco Frigerio (ICS Maugeri Spa)*; Massimo Borra (Italian worker's compensation authority (INAIL))
82	N4-TS2	Thursday, June 20th, 2023	11:30-13:30	Power systems and smart grids - 4	Influence of Interferences in the Relation Between Ampacity and Induced Voltage on Sheath in Double-Circuit Underground Lines	Jaimis Leon (Unicamp)*; Jesus Guevara (Unicamp); Sergio Kurokawa (Unesp); Jose Pissolato (Unicamp)
130	N4-TS2	Thursday, June 20th, 2023	11:30-13:30	Power systems and smart grids - 4	PEACE: Physics-Enabled Autoencoder Detection and Localization of Load-Altering Attacks in Smart Grids	Mohammad Ali Sayed (Concordia University)*; Nathalie Wehbe (Concordia University); Khaled Sarieddine (Concordia University); Ribal Atallah (Hydro-Quebec
146	N4-TS2	Thursday, June 20th, 2023	11:30-13:30	Power systems and smart grids - 4	Comparative Analysis of Transient Responses in Synchronous Generators with and Without Damper Winding	Nikolay Djagarov (Nikola Vaptsarov Naval Academy)*; Dimitar Tsvetanov (Nikola Vaptsarov Naval Academy) Ibtissam Kharchouf (Florida International University)*; Hossam M Hussein (Florida International University); Mahmoud Abdelrahman (FLORIDA
179	N4-TS2	Thursday, June 20th, 2023	11:30-13:30	Power systems and smart grids - 4	CHIL Testbed of a Distributed Consensus Multi-Agent System Control Under Denial of Service Attacks	INTERNATIONAL UNIVERSITY); S M Sajjad Hossain Rafin (Florida International University); Osama Mohammed (Florida International University)
189	N4-TS2	Thursday, June 20th, 2023	11:30-13:30	Power systems and smart grids - 4	Digital Twin-Based Approach for Monitoring and Event Detection in PV Systems	Mahmoud Abdelrahman (FLORIDA INTERNATIONAL UNIVERSITY)*; Hossam M Hussein (Florida International University); Ibtissam Kharchouf (Florida
217	N4-TS2	Thursday, June 20th, 2023	11:30-13:30	Power systems and smart grids - 4	Real-time system for detection and classification power quality disturbances	Aleksandra Zlatkova (Faculty of Electrical Engineering and Information Technologies)*; Dimitar Taskovski (Faculty of electrical engineering and information
234	N4-TS2	Thursday, June 20th, 2023	11:30-13:30	Power systems and smart grids - 4	Cyber Induced Harmonic Instability of Inverter-Based Renewable Generators	Masoud Zadsar (Concordia University)*; Masoud Babaei Vavdareh (Concordia University); Mohsen Ghafouri (Concordia University); Amir Ameli (Lakehead
46	N4-TS3	Thursday, June 20th, 2023	11:30-13:30	Industry applications - 2	Field Test and Operation of Utility-Scale Battery Energy Storage System for Fast Frequency Response	Yasuaki Mitsugi (TMEIC)*; Takahiro Terazono (TMEIC); Hiroaki Niimi (Nippon Koei Energy Europe B.V.); Sarang Boddupalli (Nippon Koei Energy Europe B.V.);
270	N4-TS3	Thursday, June 20th, 2023	11:30-13:30	Industry applications - 2	Passageway Lighting Control System Employing Pulse-Based Voltage Modulation for Energy Management Purposes	SeyyedMohammadEsmaeil Ghasemzadeh (South Khorasan Electricity Distribution Company (SKEDC)); Erfan Shirdare (Sapienza University of Rome); Mostafa
312	N4-TS3	Thursday, June 20th, 2023	11:30-13:30	Industry applications - 2	Gravure printing for Sodium-ion batteries manufacturing: a first attempt of printed cathode	Maria Montanino (ENEA)*; Claudia Paoletti (ENEA); Anna De Girolamo Del Mauro (ENEA); Giuliano Sico (ENEA)
315	N4-TS3	Thursday, June 20th, 2023	11:30-13:30	Industry applications - 2	Power and Energy Harvesting Efficiency Under Different Environmental Sources Using Piezoelectric Mechanism for Industrial Applications	Muath A Bani Hani (Jordan University of Science and Technology)*; Bara'ah Nemrawi (Jordan University of Science and Technology); Wasim Barham (Jordan
333	N4-TS3	Thursday, June 20th, 2023	11:30-13:30	Industry applications - 2	Empowering Resilient Hospital Microgrids in Gaza with a Novel Toolbox for Sustainable Energy Solutions	Bharath Kumar Sugumar (University of Pavia)*; Norma Anglani (University of Pavia)
347	N4-TS3	Thursday, June 20th, 2023	11:30-13:30	Industry applications - 2	Electrostatic Hazards in Power Systems	Massimo Mitolo (Irvine Valley College)*; Gianfranco Di Lorenzo (Sapienza University of Rome); Erika Stracqualursi (Sapienza University of Rome); Rodolfo
36	N4-TS4	Thursday, June 20th, 2023	11:30-13:30	SS - Sustainable innovations in photovoltaics	Comparative analysis of the performance of floating and ground-mounted photovoltaic panels: an experimental approach	Giovanni Cipriani (University of Palermo); Vincenzo Di Dio (University of Palermo); Alessandro Dioguardi (University of Palermo); Stefania Guarino (University
134	N4-TS4	Thursday, June 20th, 2023	11:30-13:30	SS - Sustainable innovations in photovoltaics	Noise Canceling-FPPT for PV Systems under Fluctuating Irradiance Conditions	Jiang Yuan (Xi'an Jiaotong Liverpool University); Jieming Ma (Xi'an Jiaotong-liverpool University)*; Zhongbei Tian (University of Liverpool); Ka Lok Man (Xi'an
149	N4-TS4	Thursday, June 20th, 2023	11:30-13:30	SS - Sustainable innovations in photovoltaics	Optimal Design and Technical Analysis of Photovoltaic Panels: a Case Study in Vaasa, Finland	Arya Ashrafi (University of Vaasa); Mohammad Fatemi (University of Vaasa); Zohreh Kaheh (University of Vaasa)*; Miadreza Shafie-khah (University of Vaasa)
200	N4-TS4	Thursday, June 20th, 2023	11:30-13:30	SS - Sustainable innovations in photovoltaics	An Improved Method to Estimate PV Hosting Capacity for Distribution Grid	Samantha Nakahira (Hawaii Natural Energy Institute)*; quynh TRAN (Hawaii Natural Energy Institute); Yan Chen (Hawaii Natural Energy Institute); Leon Roose
242	N4-TS4	Thursday, June 20th, 2023	11:30-13:30	SS - Sustainable innovations in photovoltaics	Opportunities in solar energy market. A Romanian case study	Anca Constantinescu (Technical University of Cluj-Napoca)*; Claudia Martis (Tehnical University of Cluj-Napoca); Madalina Alexandra Cotiu (Tecnical University
272	N4-TS4	Thursday, June 20th, 2023	11:30-13:30	SS - Sustainable innovations in photovoltaics	Detecting abnormal profiles in a PV power plant data using learning algorithms	Hamza Benrabah (Silesian University of Technology); Michał Jasiński (Wroclaw University of Science and Technology)*; Zbigniew Leonowicz (Wroclaw
151	N4-TS5	Thursday, June 20th, 2023	11:30-13:30	SS - Advanced simulation tools and models for power system dynamics	Impact of the Connection of a 100 MW Proton Exchange Membrane Electrolyzer on Rotor Angle Transient Stability	Francesco Pendola (Università degli Studi di Genova)*; Guy Wanlongo (UCLouvain); Virginie Kluyskens (UCLouvain); Emmanuel de Jaeger (UCLouvain);
254	N4-TS5	Thursday, June 20th, 2023	11:30-13:30	SS - Advanced simulation tools and models for power system dynamics	Electricity Demand Forecasting via MRA for Türkiye	Neslihan Hepzarif (Warsaw University of Technology)* Abdelhakim Idir (M'sila University)*; Zemmit Abderrahim (University of M'sila); Mokhtar Nesri (Ecole Supérieur Ali Chabati, Reghaia, Algiers); Sifelislam
255	N4-TS5	Thursday, June 20th, 2023	11:30-13:30	SS - Advanced simulation tools and models for power system dynamics	PID Controller Design with a New Method based on Fractionalized Integral Gain for Cruise Control System	Guedida (UER ELT, Ecole Militaire Polytechnique, 16111 Algiers); Hamza Dr AKROUM (University M'Hamed Bougara of Boumerdes Faculty of Engineering);
318	N4-TS5	Thursday, June 20th, 2023	11:30-13:30	SS - Advanced simulation tools and models for power system dynamics	Real-Time Simulation of Island Electric System with Grid-Forming Controlled BESS	Rossano Musca (University of Palermo)*; Mariano G Ippolito (DEIM - Università di Palermo); Eleonora Riva Sanseverino (University of Palermo); Gaetano Zizzo Emmanuel Ebinyu (Egypt Jap