

Conference Program

May 28

08:30 13:00	Registration
13:30 15:00	Welcome Buffet
15:00 15:15	Welcome Address (CASTELLO room) On. Dott. Christian Solinas – President of the Regione Autonoma della Sardegna Dott.ssa Anita Pili – Regional Minister for Industry – Regione Autonoma della Sardegna Dott. Alberto Scanu - President of Confindustria Sardegna Prof. Maria del Zompo - Rector of the Università degli Studi di Cagliari Prof. Corrado Zoppi - President of the Faculty of Engineering and Architecture, Università degli Studi di Cagliari Prof. George E. Georghiou, Prof. Grigoris Papagiannis, Prof. Fabrizio Pilo - Chairmen SyNERGY MED 2019
15:15 15:45	Keynote: Smart Grids and Smart Districts for Smart Cities (CASTELLO room) Prof. Carlo Alberto Nucci - Università di Bologna
15:45 16:00	Coffee break
16:00 18:00	Round Table – ENERGY MARKET: New Technologies and challenges for improving the access to Energy in the Mediterranean Area (CASTELLO room) Moderator: Prof. Lucia Ruggeri - Università degli Studi di Camerino Panelists: • Dr. Enrico Maria Carlini, System & Market Operations, Director at Terna S.p.A. • Dr. Marine Cornelis, Executive Director, NextEnergyConsumer • Prof. Christian Cristofari, University of Corsica Pascal Paoli • Prof. Manuela Giobbi, University of Perugia • Prof. Ivana Kunda, University of Rijeka • Prof. Carine Staropoli, Pantheon-Sorbonne University - Paris I • Prof. Bertrand Raison, University of Grenoble Final Remarks • Prof. Domenico Villacci, President Ensiel
18:00 20:00	Guided Walking Tour of Cagliari

May 29

09:00 09:30	Keynote: DC supergrids for large integration of renewable energy sources (VILLANOVA room) Prof. Bertrand Raison – University of Grenoble - Les Alpes	
09:30 11:00	Session 1 – Microgrid modeling (VILLANOVA room) Chairman Prof. Carlo Alberto Nucci - Università di Bologna Re-Synchronization control strategy for master-slave controlled microgrids <i>A. Cagnano, E. De Tuglie, A. Cervi, R. Stecca, R. Turri, A. Vian</i> Enhanced Frequency Response of Inverter Dominated Low Inertia Power Systems <i>M. Hadjikypris</i> Validation of the dynamic model of the PrInCE Lab CHP through real-time measurements <i>A. Vian, A. Cervi, R. Stecca, A. Cagnano, E. De Tuglie</i> Virtual Inertia in a Microgrid with Renewable Generation and a Battery Energy Storage System in Islanding Transition <i>J. Amankwah Adu, J. D. Rios Penaloza, F. Napolitano, F. Tossani</i>	Session 2 – Power Systems Optimization (STAMPACE room) Chairman Prof. Christian Cristofari - University of Corsica Pascal Paoli Decentralized Voltage Optimization based on Network Partitioning in Distribution Systems with DGs <i>A. R. Di Fazio, M. Russo, M. De Santis</i> Concurrent control of MV and LV networks for ancillary services provision <i>Marco Agostini, Fabio Bignucolo, Massimiliano Coppo, Jan Marc Schwidtal, Roberto Turri</i> The Podcast Project: an Application of Volt/Var Optimization to the Electric Distribution Network of Sanremo (Italy) <i>F. Silvestro, M. Crosa di Vergagni, F. D'Agostino, S. Massucco, P. Pongiglione, M. Saviozzi</i> Optimal placement of sectionalizing switches for radial distribution grids <i>M. Pau, F. Ponci, A. Monti</i> Split-phase: a sustainable technical solution for low environmental impact power transmission lines <i>R. Turri, R. Spezie, A. Donini, R. Cortina, L. Zuccolo</i>
11:00 11:15	Coffee Break	
11:15 13:00	Session 3a – Energy Storage Part 1 (VILLANOVA room) Chairman Prof. George. E. Georghiou – University of Cyprus A GaN-Based Battery Energy Storage System for Three-Phase Residential Application with Series-Stacked devices and Three-Level Neutral Point Clamped Topology <i>M. Moradpour, P. Ghani, P. Pirino, G. Gatto</i> Provision of frequency regulation service and peak demand reduction by distributed Battery Storage Systems <i>C. Yianni, G. E. Georgiou, V. Venizelou, V. Efthymiou</i> SOC-based BESS control logic for dynamic frequency regulation in microgrids with renewables <i>G. Gradiati, R. Ciavarella, M. Di Somma, G. Guidi, M. Valenti</i> System Implementation and Preliminary Results of a Community Battery Energy Storage System <i>A. Armenakis, N. Chatzigeorgiou, S. Afxenti, K. Panagiotou, V. Efthymiou, G. E. Georghiou</i>	Session 4 – Customer engagement and Demand Response (STAMPACE room) Chairman Prof. Roberto Turri – Università di Padova Libra: a cloud-based platform for production and load aggregation <i>G. Troglio, S. Bianchi, G. Viano</i> Architectural Design of Decentralized Demand Response with Integrated Peer-to-Peer Technology <i>V. Venizelou</i> Addressing Demand Response Interoperability challenges for small prosumers – The DRIMPAC project concept <i>D. Tzovaras, A. Papanikolaou, G. Pitsiladis, I. Damousis, G. E. Georghiou</i> Improving Energy Efficiency in Smart-houses by Optimizing Electrical Loads Management <i>C. L. Cabrita, J. Monteiro, P. J. S. Cardoso</i> Phasor Data Concentrator functionalities to support a Multi-Agent Control System in Active Distribution Networks <i>P. Castello, S. Mocci, S. Ruggeri, S. Sulis</i>
13:00 14:00	Lunch	

14:00 15:30	Session 3b – Energy Storage Part 2 (VILLANOVA room) Chairman: Prof. Alfonso Damiano – Università degli Studi di Cagliari Sizing of Electrical and Thermal Storage Systems in the Nearly Zero Energy Building Environment – A comparative assessment <i>V. Gjorgievski, A. Nousdilis, E. Kontis, G. Kryonidis, G. Barzegkar-Ntovom, S. Cundeva, G. Christoforidis, G. Papagiannis</i> Performance Assessment of Electrical Storage on Prosumers Via Pilot Case Studies <i>G. Barzegkar-Ntovom, E. Kontis, G. Kryonidis, A. Nousdilis, G. Christoforidis, G. Papagiannis</i> Technical Assessment of Coupled PV and Battery Systems – A case study from the Mediterranean region <i>S. Afxentis, N. Chatzigeorgiou, V. Efthymiou, I. Papageorgiou, G. Papagiannis, G. Christoforidis, J. Sancho, H. Rodrigues, C. Casimiro, N. Poize, T. Pristovnik, S. Mocci, A. Rubiu</i> Analysis of "Increase Self-Consumption" Battery Energy Storage System Use – A Residential Case Study in Cyprus <i>N. Chatzigeorgiou, S. Afxentis, K. Panagiotou, G. E. Georghiou</i>	Session 5 – Load Profiling for Customer Engagement (STAMPACE room) Chairman: Prof. Grigoris Papagiannis - Aristotle University of Thessaloniki Exploring the potential of metaheuristics-based clustering in load profiling applications <i>I. P. Panapakidis, A. S. Bouhouras, G. Christoforidis</i> A multipurpose ICT platform for supporting energy transition: first results in flexibility profiling <i>U. Stecchi, Javier Gomez, Lourdes Gallego, F. Santori, Juan Rico</i> Updated typical daily load profiles for LV distribution networks customers <i>F. Pilo, G. Pisano, M. Troncia</i> Non-intrusive loads monitoring techniques for house energy management <i>B. Cannas, S. Carcangiu, A. Fanni, C. Muscas, G. Sias</i>
15:30 15:45	Coffee break	
15:45 17:30	Session 6 – Load and generation forecasting (VILLANOVA room) Chairman Prof. Pierluigi Caramia - Università degli Studi di Napoli Parthenope Electric vehicle load forecasting: a comparison between time series and machine learning approaches <i>L. Buzna, P. De Falco, S. Khormali, D. Proto, M. Straka</i> Probabilistic Harmonic Analysis for Waveform Distortion Assessment of Low Voltage Distribution Systems with Plug-in Hybrid Electric Vehicles <i>P. Caramia, D. Proto, P. Varilone, A. Russo</i> Metaheuristics-based Input Selection for Neural Networks: Application in Short-Term Load Forecasting <i>I. P. Panapakidis, Aggelos S. Bouhouras, G. C. Christoforidis</i> Evaluation of different PV power forecasting systems on grid-connected PV plants in the Mediterranean Area. <i>E. Collino, D. Ronzio, R. Bonanno, G. Partasides</i> Characterizing the solar irradiation by means of spectral measurements for modelling CPV production <i>D. Ronzio, E. Collino</i>	Session 7 – Transmission systems (STAMPACE room) Chairman Prof. Gianni Celli – Università degli Studi di Cagliari Critical Assessment of Potential Barriers for Integrating the Emerging Technologies in the Pan-European Network Considering the Future EU Grid Scenarios <i>G. Graditi, R. Ciavarella, M. Di Somma, M. Hadjikypris, A. M. Khavari, M. Valenti</i> Analysis of Sardinia-Italy Energy Flows with Future Transmission Investments for Increasing the Integration of RES <i>P. Corona, E. Ghiani, J. Contreras</i> Scheduled profile at TSO/DSO interface for reducing balancing costs <i>N. Natale, F. Pilo, G. Pisano, G. G. Soma</i> An integrated profit maximization model for retailers in deregulated energy markets <i>I. Panapakidis, N. Koltsaklis, G. Christoforidis, C. Parisses</i> Portfolio strategies for renewable energy share maximization <i>S. Zedda</i>
20:00 23:00	Social Dinner in the city center	

May 30

09:00 09:30	Keynote: Monitoring and analysis of R&I projects on smart grids and vectors integration at European and global level (CASTELLO room) Dr. Iva Gianinoni – Ricerca sul Sistema Elettrico (RSE) SpA, Italy
09:30 11:00	Session 8a – Research projects for RES integration (CASTELLO room) Chairman Prof. Fabrizio Pilo – Università degli Studi di Cagliari PANTERA-A Pan European Technology Energy Research Approach <i>C. Papadimitriou, V. Efthymiou, M. Shalaby, S.Khadem, G. E. Georghiou</i> An ecosystemic approach for energy transition in the Mediterranean region <i>C. Echave, D. Ceh, A. Boulanger, J. Shaw-Taberlet</i> Renewable Energy Community WebGIS as a capitalization tool for the Mediterranean Region <i>A. Boulanger, M. Franchino, P. Zitella, D. Ceh, C. Echave, J. Shaw-Taberlet</i> Paglia-Orba – Focus on innovative CSP system integrated in highly flexible technological Smart Grid <i>C. Cristofari, B. Lecoeuvre, G. A. Faggianelli, J. Canaletti</i>
11:00 11:30	Coffee Break
11:30 12:45	Session 8b– Research projects for RES integration (CASTELLO room) Chairman Prof. Fabrizio Pilo – Università degli Studi di Cagliari Social and economic impact of a waste-to-energy strategy applied to the winemaking chain: a case study in the Italian countryside <i>D. Groppi, M. Lamagna, M. Carlucci, D. A. Garcia</i> A methodology for Energy Planning in Small Mediterranean Islands, the case of the Gozo Region <i>D. Groppi, D. Cassar, Erika Massa, E. Rikos, C. Perakis, A. Pfeifer, G. Krajacic, D. A. Garcia</i> The POSEIDON Project: microgrid in port areas to improve energy efficiency by the integration of RES, flexible loads and smart mobility <i>S. Mocci, M. Porru, A. Serpi, G. G. Soma</i> Modelling and optimization approach of residential Energy Hub: the GHOTEM project <i>A. Vian, F. Bignucolo, M. De Carli</i>
12:45 13:00	Conclusion and final remarks (CASTELLO room) • Prof. G. E. Georghiou – University of Cyprus • Prof. G. Papagiannis - Aristotle University of Thessaloniki • Prof. F. Pilo – Università degli Studi di Cagliari
13:00 14:00	Lunch