

COST Action CA16235 PEARL PV

Performance and Reliability of Photovoltaic Systems: Evaluations of Large-Scale Monitoring Data

## COST Action PEARL PV's Conference *Enabling the PV Terawatt Transition*

University of Twente, Enschede, The Netherlands

14 – 16 March 2022

### Tentative Program – to be regularly updated

Day 1: 14 March 2022									
9:00 - 12:30h	<p style="text-align: center;"><b>Plenary session</b></p> <p>9:00h <b>Opening ceremony</b> with Ms. Gordana Kregar, COST Association, Brussels, Belgium Prof. dr. Angèle Reinders, University of Twente, Eindhoven University of Technology, the Netherlands Prof. dr. Wilfried van Sark, Utrecht University, the Netherlands Dr. David Moser, EURAC, Italy</p> <p>9:30h <b>Plenary Speaker 1: Dr. Teresa Barnes</b>, NREL, Denver, USA Title: Predicting and Extending PV Module Lifetime</p> <p>10:00h <b>Plenary Speaker 2: Prof. dr. Monica Lira-Cantu</b>, Catalan Institute of Nanoscience and Nanotechnology ICN2, Barcelona, Spain Title: Perovskite Solar Cell Stability</p> <p>10:30h Coffee &amp; tea break</p> <p>11:00h <b>Plenary Speaker 3: Prof. dr. Christophe Ballif</b>, Ecole Polytechnique Fédérale de Lausanne (EPFL) and CSEM, Neuchâtel, Switzerland Title: Photovoltaics go fast: improved technologies and carbon footprint for a wider range of applications</p> <p>11:30h <b>Plenary Speaker 4: Prof. dr. Jan Kleissl</b>, University of California, San Diego, USA Title: Solar Forecasting</p> <p>12:00h Q&amp;A and panel discussion</p>								
12:30 - 14:00h	Lunch Break								
14:00 - 17:30h	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%; text-align: left; padding: 5px;"><b>Session 1: PV in Grids</b></th> <th style="width: 50%; text-align: left; padding: 5px;"><b>Session 2: PV Monitoring</b></th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">14:00 Opening by Jonathan Leloux, LuciSun, Brussels, Belgium</td> <td style="padding: 5px;">14:00h Opening by Wilfried van Sark, Utrecht University, the Netherlands</td> </tr> <tr> <td style="padding: 5px;">14:05 Rodrigo Silva e Amaro (Mines ParisTech, France) Title: Novel forecasting method applied to PV</td> <td style="padding: 5px;">14:05h Anne Gerd Imenes (University of Agder, Kristiansand, Norway) Title: Keynote tbc</td> </tr> <tr> <td style="padding: 5px;">14:30 Eduardo Fernandez (University of Jaén, Spain) Title: Advances in Photovoltaic</td> <td style="padding: 5px;">14:35h Maria Hadjipanayi (University of Cyprus, Nicosia, Cyprus) Title: PV monitoring</td> </tr> </tbody> </table>	<b>Session 1: PV in Grids</b>	<b>Session 2: PV Monitoring</b>	14:00 Opening by Jonathan Leloux, LuciSun, Brussels, Belgium	14:00h Opening by Wilfried van Sark, Utrecht University, the Netherlands	14:05 Rodrigo Silva e Amaro (Mines ParisTech, France) Title: Novel forecasting method applied to PV	14:05h Anne Gerd Imenes (University of Agder, Kristiansand, Norway) Title: Keynote tbc	14:30 Eduardo Fernandez (University of Jaén, Spain) Title: Advances in Photovoltaic	14:35h Maria Hadjipanayi (University of Cyprus, Nicosia, Cyprus) Title: PV monitoring
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	<p>Technology: current activities and future actions</p> <p>15:00 Ibrahim el Boujdaini (LuciSun, Belgium) Title: Analysis of the state of the art and performance of more than one decade of residential PV in Brussels (11.000+ PV installations)</p> <p>15:30 Refreshments</p> <p>16:00 Leonardo Micheli (*) Title: Advances and perspectives in agrivoltaic applications in Europe</p> <p>16:30 Grazia Barchi (EURAC, Italy) Title: Assessment and countermeasures of the PV systems integration in distribution power grids</p> <p>17:30 Emilio Muñoz (University of Jaén, Spain) Title: Photovoltaic engineering applications: alternatives to standard designs</p>	<p>15:05h Paolo Graniero (Helmholtz-Zentrum Berlin, Berlin, Germany) Title: Comparison of unsupervised algorithms for PV fault detection, and data sources for power nowcasting</p> <p>15:30h Refreshments</p> <p>16:00h Bogdan Burduhos (Transilvania University of Brasov, Brasov, Romania) Title: PV monitoring small systems</p> <p>16:20h Bhavya Kausika (Cadastre NL, Zwolle, the Netherlands) Title: GeoAI for detection of Solar Photovoltaic installations in the Netherlands</p> <p>16:40h Ben Laevens (Statistics Netherlands, The Hague, the Netherlands) Title: An Observational method for determining daily and regional photovoltaic solar energy statistics</p> <p>17:00h Lennard Visser (Utrecht University, Utrecht, the Netherlands) Title: Operational day-ahead solar power forecasting for aggregated PV systems with a varying spatial distribution</p> <p>17:20h Closing remarks by Wilfried van Sark, Utrecht University, the Netherlands</p>
17:30 – 19:00h	Break	
19:00 – 22:00h	Evening Program with Group Dinner	
<b>Day 2: 15 March 2022</b>		
9:00 - 12:30h	<p><b>Session 3: Reliability and Durability of PV</b></p> <p>9:00h Opening by Jeff Kettle, University of Glasgow, United Kingdom</p> <p>9:10h Gernot Oreski (PCCL, Austria) Title: Future challenges for PV module reliability</p> <p>9:40h TBC (*) Title: TBC</p> <p>10:05 Mirjam Theelen (TNO, Eindhoven, the Netherlands) Title: PID reliability challenges in CIGS modules</p>	<p><b>Session 4: PV Simulation of PV of PV of PV</b></p> <p>9:00h Opening by Nicola Pearsall, Northumbria University, United Kingdom</p> <p>9:15h TBC Title: PVGIS Update</p> <p>9:40h Bruno Wittmer (PVSyst) Title: PVSyst development</p> <p>10:05h Anja Neubert (DNVGL) Title: SolarFarmer approach</p>

	<p>10:30h Coffee &amp; tea break</p> <p>11:20h Hugo Quest (Ecole Polytechnique Fédérale de Lausanne (EPFL), Neuchâtel, Switzerland) Title: Solar irradiance classification for improved PV performance assessments</p> <p>11:40h Atse Louwen (EURAC, Bolzano, Italy) Collaborative development and comparison of fault detection algorithms using the PearlPV CKAN database</p> <p>12:00h Reza Aghaei (NTNU, Norway) Title: AI technology for PV condition monitoring</p>	<p>10:30h Coffee &amp; tea break</p> <p>11:00h TBC (*) Title: TBC</p> <p>11:40h Jesus Robledo Bueno (LuciSun, Brussels, Belgium) Title: Simulating complex systems</p> <p>12:20h Discussion and closing remarks by Nicola Pearsall, Northumbria University, United Kingdom</p>
12:30 - 14:00h	Lunch Break	
14:00 - 17:00h	<p><b>Session 5: PV in the built environment</b></p> <p>Programme to be announced soon</p>	<p><b>Workshop: PV Data Challenge</b></p> <p>Programme to be announced soon</p>
17:00 – 17:15h	Break	
17:15 – 18:15h	<p><b>Plenary Session</b></p> <p>Wrap up and closure of the conference by Prof. dr. Wilfried van Sark, Utrecht University, the Netherlands Dr. David Moser, EURAC, Italy Prof. dr. Angèle Reinders, University of Twente, TU/e, the Netherlands</p>	
18:15 – 19:00h	Break	
19:00 – 22:00h	Evening Program with Group Dinner	
<b>Day 3: 16 March 2022</b>		
9:00 – 16:00h	Excursion with drop-off at airport Schiphol, Amsterdam	