



Summer School

September 14th – 15th 2023

Location: DLR Casino

Thursday, September 14th

8:30 – 9:00 **Registration**
at the entrance to DLR Casino

9:00 – 9:05 **Opening and Welcome**

9:05 – 9:45 **Introduction to Smart CSP**
Daniel Maldonado Quinto, DLR

9:45 – 10:25 **Meteorological forecast + Simulation pipeline tool for a more efficient management of solar thermal power plants**
Prof. Eduardo Zarza, CIEMAT

10:25 – 10:55 **Coffee Break**

10:55 – 11:35 **Data Clustering and Genetic Algorithm for the Design Optimization of a Hybrid Concentrated Solar System for SHIP**
Valéry Vuillerme, CEA

11:35 – 12:15 **Condition monitoring in solar process heat applications**
Hannes Laget, Azteq

12:15 – 13:45 **Lunch**

13:45 – 14:25 **Towards a fully automated flux density prediction using data driven models**
Max Pargmann, DLR

14:25 – 15:05 **Model predictive control for molten salt solar tower receivers**
Rudolf Popp, IRT, RWTH

15:05 – 15:35 **Coffee Break**

15:35 – 16:15 **Application of AI methods for operation and maintenance improvements in CSP power plants**
Thomas Kraft, ISE

* This project has received funding from the European Union's Horizon2020 Research and Innovation programme under the grant agreement n°823802



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9:00 – 9:40	Optimization and automation of the operational strategy of a CSP reactor for thermochemical hydrogen generation Jörg Lampe, RFH
9:40 – 10:20	Development of an automation software for the control and operation of a solar refinery with redox reactors Remo Schächli, ETH
10:20 – 10:50	<i>Coffee Break</i>
10:50 – 11:30	5G and IOT Platform for CSP plants Inga Miadowicz, DLR
11:30 – 12:10	The role of Business Models in helping solar technologies succeed Pinar Derin, METU
12:10 – 12:20	<i>Closing Remarks</i>
12:20 – 13:00	<i>Coffee Break</i>
13:00 – 14:30	Technical Visit Cologne Possibility to visit different experimental setups at DLR Cologne

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