ENERGIA SOLARE TEST E RICERCA
LABORATORI DI FISICA TECNICA AMBIENTALE
UNIVERSITÀ DEGLI STUDI DI ROMA 'TOR VERGATA'

Università di Roma Tor Vergata

Avviso di Seminario

MARTEDI' 29 MAGGIO 2018 ore 10:00 AULA da definire

The solar city: PV potential in the urban environment

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Contemporary urban landscapes with high rising buildings offer relatively little room for solar energy applications on roofs. This talk will explore the potential of extending solar PV to building façades, discussing its potential, and how to assess it, and how to get the most out of it. Solar potential on façades is assessed using 3D modelling based on LiDAR data. Results show that façades can double the solar potential of a modern city, in spite of lower irradiation and hence higher cost. This leads to the discussion of how to maximize PV on vertical features but also on the possibility to better adjust supply and demand in residential buildings with PV systems, in particular for solar communities.

CV of Miguel Centeno Brito

Miguel is a physicist with PhD from University of Oxford, UK, currently Assistant Professor in the Earth Science and Energy Department of the Faculty of Sciences of the University of Lisbon. With 20 years of experience with solar power, he has worked on material sciences for solar cells and, more recently, on solar resource assessment and forecasting, PV performance, PV systems in the urban environment, solar electrification for remote areas and the role of solar energy in future energy scenarios. He has about 40 papers in international scientific journals. He is the leader of the Energy Transition Group and Board Member of the Instituto Dom Luis, Associated Research Centre of the University of Lisbon.