

Webinar Series



Constructing a Digital Environment

Topic: Data Learning - Integrating Data Assimilation and Machine Learning for reliable AI models

Speaker: Dr. Rossella Arcucci

Time: Friday 23rd June 11:00 GMT

Registration and further details:

https://ukri.zoom.us/webinar/register/WN_9odfE46BQI63U0wTm24Gzg

Rossella Arcucci is a Lecturer in Data Science and Machine Learning at Imperial College London (ICL). She is an elected member of the World Meteorological Organization and the elected speaker of the AI Network of Excellence at ICL where she represents more than 270 academics working on AI. She has been with the Data Science Institute at ICL since 2017 where she has created, and she leads the Data Assimilation and Machine Learning (Data Learning) group.



In this talk Rossella will introduce Data Learning, a field that integrates Data Assimilation and Machine Learning. Data assimilation (DA) is a techniques used to develop digital twins, considering the uncertainties of both model and data. However, these approaches are linear and are often incapable to fully represent the real world situations. Machine learning (ML) shows great capability in approximating nonlinear systems and extracting meaningful information from high dimensional data. Integration of ML with DA increases the reliability of prediction by including information in real time and with a physical meaning.

The **NERC Constructing a Digital Environment (CDE) programme** is running a series of online Webinars, aiming to develop the digitally enabled environment, benefitting scientists, policymakers, businesses, communities and individuals. Our seventh webinar series, led by Expert Network member Matt Fry, UKCEH, focusses on the development, use and application of Artificial Intelligence techniques in Environmental Science.



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