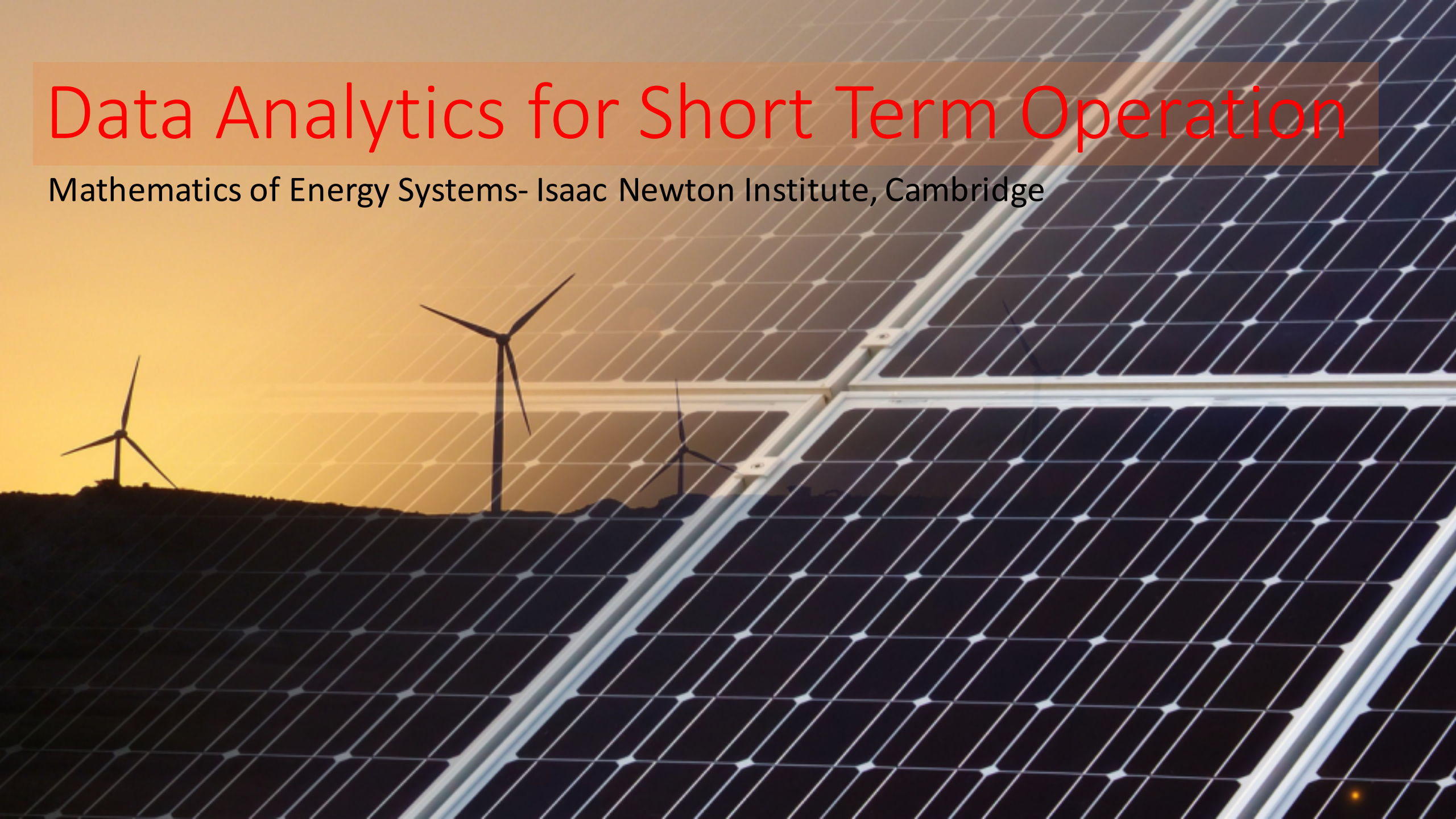


# Data Analytics for Short Term Operation

Mathematics of Energy Systems- Isaac Newton Institute, Cambridge





# Programme of the week (25 Feb - 1st Mar)

## Monday: Challenges and current needs from an applied perspective

- 9h30-10h00 Introduction (Pierre & Yannig)
- 10h00-11h00 Stephen Haben, Energy Systems Catapult
- 11h00-12h00 Antoine Marot, RTE
- Afternoon: attendees are expected to give a 5-10mns statements on challenges/opportunities they see in analytics for operations (register with Yannig/Pierre so as to make a schedule and list topics/statements)

**Evening: “Social” event: pub dinner with all participants present, *The Maypole 20A Portugal Place, Cambridge***

## • Tuesday: Modern statistical and machine learning approach for forecasting applications

- 9h30-10h30 Olivier Wintenberger (UPMC)
- 11h00-12h00 Pierre Gaillard (INRIA)
- 14h00-15h00 Idris Eckley (Lancaster University)

## • Wednesday: High dimensional modelling and forecasting (Qiwei Yao, Sylvain Arlot)

- 9h30-10h30 Qiwei Yao (LSE)
- 11h00-12h00 Sylvain Arlot (UPSUD)
- 14h00-15h00 Jethro Browell (University of Strathclyde)

## • Thursday: Probabilistic forecasting (Matteo Fasiolo, Florian Ziel)

- 9h30-10h30 Matteo Fasiolo (University of Bristol)
- 11h00-12h00 Florian Ziel (University Duisburg-Essen)
- 14h00-15h00 Souhaib Ben Taieb (University of Mons)

## • Friday: wrap up and workplan - the aim of this working week is to reach a white paper or research agenda at the interface between energy and modern analytics (i.e., statistical and machine learning)

Afternoon is dedicated to networking/work in common. Additionally to the topics above, some suggested items could be:

- open/reference data sets in electricity data analysis
- electricity data analysis at difference time/geographical scale
- interpretation of machine learning black box models
- data analytics and non-stationarity
- open source software/packages related to electricity data analysis
- ....

Please send us ([yannig.goude@edf.fr](mailto:yannig.goude@edf.fr), [ppin@elektro.dtu.dk](mailto:ppin@elektro.dtu.dk) ) items/proposal you feel should be addressed during the working sessions.

One of the ambitions for this research track at INI (if all goes according to plan) is to use all input to draft a white paper (or position paper) about the role of digitization and analytics in the future of energy systems, focusing on some of the current challenges and opportunities we will discuss over the week.