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Automatic
Control and
Systems
Engineering

The Department of Automatic Control & Systems Engineering
is pleased to announce the following seminar:

Energy systems operational optimisation and control

Dr Emmanouil Loukarakis

*Research Associate, School of Electronic and Engineering
The University of Manchester*

Wednesday, 14 December 2016 at 14:00

LT02, Sir Henry Stephenson Building

Abstract

Emerging smart-grid-enabling technologies will allow an unprecedented degree of observability and control at all levels in electrical power systems. Combined with flexible devices at the distribution level, they could allow procuring energy at minimum cost and environmental impact. The accrued benefits would be even more significant, if coordination with the operation of gas and district heating systems was possible. At the moment, significant efforts are being put into formulating and solving relevant optimal energy management and control problems. Nevertheless, a consensus has yet to be reached and a large variety of different models and methods appear in current literature - often not addressing the full scale of the problem. This presentation provides an overview of our ongoing work, including our overall perspective on energy systems management and the development of system-specific optimisation techniques.

Biography

Emmanouil Loukarakis is a power systems engineer with more than 8 years of academic and industry experience. He received his PhD from Durham University (UK) and is currently a research associate in Manchester University (UK). His research interests include energy systems optimisation, dynamics and probabilistic assessment.

*Light refreshments will be served in the
foyer of the Sir Henry Stephenson Building following the seminar*