



海岸和近海工程国家重点实验室 学术讲堂

- 题 目: Noncausal Optimal Control of Sea Wave Energy Converters
- 报告人: Dr. Guang Li
- 时间: 2021年10月29日 15:30-16:30
- 地 点: 腾讯会议房间号: 681 7974 9019

## 内容简介:

Dr Guang Li is a Reader in Control Engineering in School of Engineering and Materials Science, Queen Mary University of London. Dr Li graduated with a PhD degree in Electrical Engineering from University of Manchester. He completed several research projects as a postdoc researcher at University of Bristol, University of Exeter and Pennsylvania State University, and joined QMUL as a Lecturer in 2014. His research interests include control and control applications in offshore renewable energy, marine engineering, electrical vehicles, etc. He has published more than 130 refereed papers (including 70 Q1 journal papers). He leads several ongoing grants as a PI, totaling about £2.5M, funded by EPSRC, Innovate UK, the Royal Society, EU, Wave Energy Scotland (WES) and British Council.

Abstract: This talk will briefly summarize my recent years of work on control of sea wave energy converters (WECs). I will first briefly introduce the principle of WEC optimal control and the current state-of-the-art WEC optimal control methods. Linear non-causal optimal control (LNOC) and model predictive control (MPC) methods will be mainly presented to achieve the WEC non-causal optimality condition. Several different WECs will be used as case studies to demonstrate the efficacies of the WEC control methods by numerical simulation results and experimental results.

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