

■ Research interests

- Modelling, control and optimisation of complex systems
- Applications in renewable sector: hybrid offshore renewable, wind turbine control, airborne wind, LIDAR-based and aeroelastic tailoring blade WT control, tidal turbine control, offshore electrical infrastructure optimisation

■ Research expertise

- Model development for complex dynamic systems
- Model-based system analysis: uncertainty, sensitivity, bifurcation, robustness analysis
- Advanced control and optimisation
- Optimal and robust experimental design

Participation in Task 50: WP3

Modelling, control, optimization,
integration of airborne wind

■ Recent work in hybrid energy systems

- ① Integrated control and power management of hybrid renewable systems on offshore floating platform (wind, solar PV, diesel, energy storage)
- ② Optimisation of industrial-scale offshore wind farm infrastructure (wind, energy storage, grid)
- ③ Optimal energy management of smart energy hub (combined heat and power, gas, energy storage, grid)

