



**The 5th meeting of the
Challenger Society of Marine Science
Surface Waves Special Interest Group**

The Memorial Room, Worcester College,
University of Oxford

Monday 18 March 2024



Agenda

9:30 ~ Registration & coffee

9:50 welcome – Lucy Bricheno

10:00 Science session 1

Chair: Nefeli Makrygianni

Paul Taylor	University of Western Australia	What wave buoys actually measure
Ben Timmermans	National Oceanography Centre	Uncertainty in Observations of Sea State from Satellite Altimeters and Moored Wave Buoys in Nearshore Locations
Jean Bidlot	ECMWF	Can running the ocean wave component of the Earth System Model over small lakes have an impact on the evolutions of the atmosphere?
Tianning Tang	University of Oxford	A reduced order model for space–time wave statistics using probabilistic decomposition–synthesis method

11:20 Discussion 1: Research priorities & funding sources

12:20 ~ Lunch



13:20 Science session 2

Chair: Piyali Chowdhury

Thomas Dhoop	Channel Coastal Observatory	Enhancing storm wave data: advancements in the quality control of heave data from wave buoys
Peter Tromans	Ocean Wave Engineering	Crest statistics in a stationary sea
Bahareh Kamranzad	University of Strathclyde	Global extreme wave estimates and their sensitivity to the analysed data period and data sources
Fay Luxford	JBA	ForeCoast Rail: Revolutionising Rail Safety in Wales with Advanced Wave Overtopping and Scour Risk Forecasting for Network Rail

14:40: 3 minute Hotplots

Ben Phillips	HR Wallingford	Incorporating bimodality within coastal flood risk analysis
Lucy Bricheno	NOC	Future climate impacts on waves and seabed stress
Nefeli Makrygianni	Met Office	Clustering sea-states with K-means
Raphael Stuhlmeier	University of Plymouth	The Benjamin-Feir instability with frequency-dependent damping: applications to waves in sea-ice
Terry Sloane	Planet Ocean	Planet Ocean wave monitoring systems
Vivian Fraser-Leonhardt	Met Office	Wave ensemble forecasting with a regional coupled system
Wouter Mostert	University of Oxford	TBC

15:00 ~ Afternoon tea

15:30 Discussion 2: Strategic partnerships

16:30 ~ Meeting close



Meeting attendees

*Alejandro Gallego	Scottish Government
*Ali Mohammad Rezaie	University of Asia Pacific
Bahareh Kamranzad	University of Strathclyde
Ben Phillips	HR Wallingford
Ben Timmermans	National Oceanography Centre
Breogan Gomez	Met Office
*Claire Beraud	Cefas
*David Woolf	Heriot-Watt University
Elizabeth Warwick-Champion	Channel Coastal Observatory
*Eugenio Pugliese Carratelli	UNISA
Fay Luxford	JBA Consulting
*Giulia Mancini	Jacobs
Jana Stella	University of Manchester
Jean Bidlot	ECMWF
Judith Wolf	National Oceanography Centre
Lucy Bricheno	National Oceanography Centre
*Lucy Wyatt	University of Sheffield

Nefeli Makrygianni	Met Office
*Nieves García Valiente	University of Plymouth
Paul Taylor	University of Western Australia
Peter Tromans	Ocean Wave Engineering
Piyali Chowdhury	Cefas
Raphael Stuhlmeier	University of Plymouth
Richard Davies	Met Office
Rodney Eatock Taylor	University of Oxford
*Simon Waldman	Heriott-Watt
*Sophie Whistler	University of Exeter
Terry Sloane	Planet Ocean
Thomas Adcock	University of Oxford
Thomas Dhoop	Channel Coastal Observatory
Tianning Tang	University of Oxford
Tirren Ambroziak	OceanWise Limited
Vivian Fraser-Leonhardt	Met Office
Wouter Mostert	University of Oxford

*online only