





# 6<sup>th</sup> meeting of the

# Challenger Society Ocean Wind Waves

# Special Interest Group meeting

Monday 30<sup>th</sup> June 2025

Doodson Room, National Oceanography Centre, Liverpool

### Agenda

#### 9:30 Coffee and Welcome

### 10:00 Session 1 – Chair Julia Rulent

Simon Williams	GNSS-IR waves	
Paul Taylor	Wave-by-wave data from GPS-based buoys - spikes and spirals	
*Fabrice Ardhuin	A new wave spectra dataset from SWOT	
Ben Timmermans	Nearshore sea state variability from diverse long-term satellite	
	observations produced by the ESA Sea State CCI consortium	
Edward Roome	Rogue waves in UK coastal waters	
Claire Beraud	Merging wave modelling and coastal techniques to predict hazards	
	linked to longshore drift and shoreline dynamics in Anguilla	

Comfort Break

### 11:45 Session 2 – Chair Chris Banks

loannis Karmpadakis	Predictions of extreme waves in the coastal zone	
Bahareh Kamranzad	Long-Term Variation of Wave Climate and Energy in the UK	
Ricardo Briganti	Emerging global ocean waves extreme spatial patterns through	
_	Bayesian Hierarchical Modelling	
Julia Rulent	Seabed impacts of waves under climate change	
Dale Partridge	Impact of waves on phytoplankton activity: insights from	
	observations and km-scale coupled models	
	Estimating the failure probability of damped harmonic monopiles	
Matthew Speers	subject to wave loading.	



### **Group Photo**

13:15 Lunch, Exhibitions, and Posters

## Art Exhibition "The Haptic Eye – Haline Dreams"

### Mike Bond, University of Wales Trinity Saint David

#### **Session 3: Posters**

Carl Spingys	Wave observations from subsea cables	
Dougal Lichtman	Wave breaking in altimeter data	
Doug Pender	Update to EA joint probability guidance	
Lee Swift	The Flood and Coastal Erosion Risk Management Research	
	programme	
Lucy Bricheno	Coastal impacts of CMIP6 waves	
Lucy Wyatt	HF radar technology, applications and accuracy	

#### 14:30 Session 4 - Chair Bahareh Kamranzad

Tim Tianning Tang	Discovering Boundary Equations for Wave Breaking using Machine Learning	
Tom Adcock	Engineering hacks to the modified non-linear Schrodinger equation	
Kimberley Eastaugh	Projecting Future Wave Climates for South Africa using Artificial Neural Networks	
Jialun Chen	AI-Powered Approximation for Fast and Accurate Prediction of Nonlinear Interactions in Wave Forecasting	
Jana Stella &	NeuWave on AI innovation and commercialisation of Nearshore	
Ranjodh Rai	Wave Modelling	
Alex Lukyanov	Dynamics of oil slicks on wavy water surfaces	

16:00 Wrap-up & Depart

#### The Haptic Eye – Haline Dreams



Two years ago, I was paddle boarding off the southwest coast of Wales. The weather was fine and the water calm. There for the first time I profoundly felt the vastness and power surrounding me, it was an overwhelming direct experience - beyond words. Since then, I've been making art powered by both being with the sea and my long-standing ontological studies.

I've become increasingly interested in epistemology, particularly in direct experience as a way of knowing, so I chose the title "The Haptic Eye – Haline Dreams" for this exhibition. "The Haptic Eye" references the work of philosopher Gilles Deleuze and the film maker / philosopher Laura Marks who believed that observation should not be a removed, distant activity but that the eye "feels" and "touches the surfaces viewed, like fingers". "Haline Dreams" brings together one of the ocean's great engines of motion - salinity - and the human "sea" of Carl Jung's collective unconscious.

- Mike Bond

#### Attendees

Alex Lukyanov	Alex Lukyanov
Anais Öst	Royal College of Arts
*Arun Kumar	Cefas
Bahareh Kamranzad	University of Strathclyde
Ben Timmermans	National Oceanography Centre
Benjamin Phillips	HR Wallingford
Carl Spingys	National Oceanography Centre
Chris Banks	National Oceanography Centre
Claire Beraud	Cefas
* Dale Partridge	Plymouth Marine Laboratory
Dougal Lichtman	National Oceanography Centre
David Cotton	SatOc
Edward Roome	Bangor University
*Elizabeth Warwick-Champion	Channel Coastal Observatory
*Fabrice Ardhuin	lfremer
Hamish Drain	Heriot-Watt University
Ioannis Karmpadakis	Imperial College
Jana Stella	NeuWave Technologies
*Jean Bidlot	ECMWF
Jialun Chen	University of Oxford
John Huthnance	National Oceanography Centre
Judith Wolf	National Oceanography Centre
Julia Rulent	National Oceanography Centre
* Kate Salmon	Met Office
Katie Hodge	Met Office
* Kimberley Eastaugh	Met Office
Kit Stokes	Met Office
Lee Swift	Environment Agency
Lucy Bricheno	National Oceanography Centre
Lucy Wyatt	University of Sheffield
* Matt Lewis	Wood PLC
Matthew Speers	Lancaster University
Mike Bond	University of Wales Trinity Saint David.
*Nefeli Makrygianni	Met Office
*Paolo Cipollini	European Space Agency
Paul Bell	National Oceanography Centre
Paul Taylor	University of Western Australia
*Qingwei Ma	City, University of London and St George's
Ranjodh Rai	NewWave Technologies
Ricardo Briganti	University of Nottingham
*Sarah Connors	ESA
Simon Williams	National Oceanography Centre
Suzana Ilic	Lancaster University
Thomas Dhoop	Channel Coastal Observatory
Tim Tianning Tang	University of Oxford
Tom Adcock	
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