



Renovables

Projet euro régional dans les énergies marines renouvelables
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HYDRODYNAMICS OF WAVE ENERGY CONVERTERS (HYWEC) WORKSHOP

27 - 30 June 2022



ALERION



Scientific Committee

Jesus Maria Blanco, UPV/EHU

Gustavo Esteban, UPV/EHU

David Lannes, University of Bordeaux

Vincenzo Nava, BCAM & TECNALIA

Martin Parisot, INRIA

Mario Ricchiuto, INRIA

Time schedule

Monday, June 27th, 2022

09:00-11:00 Short Course on Design of Wave Energy Devices.

Mathematical modelling for the design of wave energy converters, Markel Peñalba.

11:00-11:30 COFFEE BREAK

11:30-12:30 Wave Energy Developer Perspective.

Modelling for design: nonlinear hydrodynamics and unexpected behavior of floating wave energy converters", Giuseppe Giorgi

Modelling the Turbine-Wave Interaction", Rafa Urrutia Arrue

Reflections on the current status of floating device modelling", Iñaki Zabala

13:30 - 15:00 LUNCH

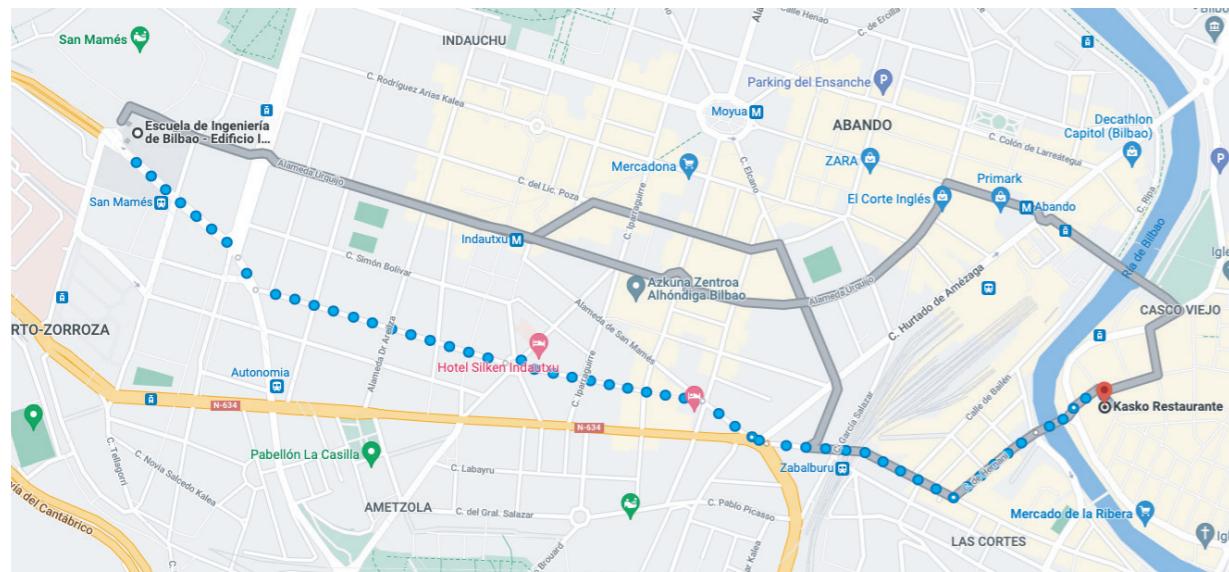
15:00-17:00 Technical Session

Multi-fidelity numerical modelling for wave energy converters, Beatrice Battisti.

Optimisation of Marine Renewable Energy Systems integration to micro-grids, Neil Luxcey.

Floating body simulations using large scale modeling, Martin Parisot.

Excitation force estimation and forecasting for wave energy control applications, Yerai Peña Sanchez.



Wifi - UPV/EHU

WIFI: EHU-wGuest

User: HYWECS

Password: ehu2022?



Tuesday, June 28th, 2022

09:00-11:00 Short Course on Mooring system design and high-fidelity modelling.

Mooring system design and high-fidelity modelling, for wave energy applications,
Johannes Palm.

11:00-11:30 COFFEE BREAK

11:30-13:30 Short Course on Data-based modelling and control of WECS.

Data-based modelling and control of wave energy converters, John Ringwood.

13:30-15:00 LUNCH

15:00-17:00 Brainstorming on Hydrodynamics Modelling of WECs.

Moderator: Francesco Ferri.

Thursday, June 30th, 2022

09:00-13:30 DTOceanPlus demonstration session.

Lead by : Francesco Ferri
Neil Luxcey
Emma Araignous
Nicolas Michelet
Vincenzo Nava

Wednesday, June 29th, 2022

09:00-13:30 - DTOceanPlus demonstration session.

Lead by : Francesco Ferri
Neil Luxcey
Emma Araignous
Nicolas Michelet
Vincenzo Nava

13:30-15:00 LUNCH BREAK

15:00-17:00 Ideas Lab.

Moderated by : Vincenzo Nava
Giuseppe Giorgi
Emma Araignous

HYDRODYNAMICS OF WAVE ENERGY CONVERTERS (HYWEC) WORKSHOP

27 - 30 June 2022

Developments of new numerical and mathematical model for the simulation of WECs in shallow water and of non-linear effects with heavy swell.

Registration starts on Monday 27th from 8:30 to 9:00h

Participants are not allowed to take pictures during the sessions without explicit permission of the speakers.

	Monday, June 27	Tuesday, June 28	Wednesday, June 29	Thursday, June 30	
9:00 - 11:00	Short Course on Design of Wave Energy Devices	Short Course on Mooring Lines modelling	DTOceanPlus Demonstration	DTOceanPlus Demonstration	
11:00 - 11:30	Coffee Break				
11:30 - 13:30	Wave Energy Developers perspective	Short Course on Data-based modelling and control of WECs	DTOceanPlus Demonstration	DTOceanPlus Demonstration	
13:30 - 15:00	Lunch				
15:00 - 17:00	Technical presentations	Brainstorming on Hydrodynamics Modelling	Ideas Lab		

Room: P0E1

Room: P0B19I

Instructions to access the “Conferences room” School of Engineering, Building I

School of Engineering Building I
Ingeniero Torres Quevedo square 1, Bilbao



Figure 1. General view of the School of Engineering (Buildings I and II) and entrance.

