

Tuesday September 5							
Registration (Main Hall)						08:00-09:00	
	Room /Track	Chairman	Paper ID	Title	Presenter		
Oral presentations	Baroja/ Wave device development and testing	Diego Vicinanza	138	Analysis of Mutlu's OWC performance	Isabel Casas	09:00-09:15	
			144	Successful innovation strategies to overcome the technical challenges in the development of wave energy technologies	Pablo Ruiz-Minguela	09:15-09:30	
			266	Spatial focussing of wave energy for improved power capture by an oscillating water column	Robert Mayon	09:30-09:45	
			352	Reference of Robustness and Uncertainties Analysis in the Optimal Design of Wave Energy Converters	Filippo Giorelli	09:45-10:00	
			176	Tuning Wave Energy Converters to local wave conditions	Wilson Guachaman-Azaro	10:00-10:15	
			466	Enabling the Ocean Internet of Things with Renewable Marine Energy	Matthew Topper	10:15-10:30	
	Laboa/ Tidal device development and testing	Stephanie Ordoñez-Sánchez	166	Interscale Active Blade Pitch Control for Cross-Flow Tidal Turbines Using Embedded Electric Drive Systems	Zhao Zhao	09:00-09:15	
			209	Numerical optimisation of the active lift turbines using OpenFoam's overset method	Ian Robin	09:15-09:30	
			231	Non-dimensional scaling of passive adaptive blades for a marine current turbine	Katherine Van Ness	09:30-09:45	
			264	Optimal Design of a Submerged Tidal Device for Low Current Environment	Seoung-won Jeong	09:45-10:00	
			343	Designing Vortex Generators for Tidal Turbine Blades	George Papadakis	10:00-10:15	
			617	Leveraging Explainable Artificial Intelligence for Real-time Detection of Tidal Blade Damage	Muslim Jameel Syed	10:15-10:30	
	Arriaga/ Wave hydrodynamic modelling	Gareth Tomas	317	Verification and validation of MoodyMare - A free simulation tool for modelling moored WEC devices	Johannes Palm	09:00-09:15	
			321	A hybrid linear potential flow - machine learning model for enhanced prediction of WEC performance	Claes Eskilsson	09:15-09:30	
			476	Design Wave analysis of the M4 wave energy converter device	Orlaine Lynggaard Hansen	09:30-09:45	
			487	Hydrodynamic studies of a 15 MW semi-submersible FOWT to assess the suitability of the inclusion of a damper system	Yu Gao	09:45-10:00	
			145	On the state-of-the-art of CFD simulations for wave energy conversion within the open-source numerical framework of OpenFOAM	Aljondro Crespo	10:00-10:15	
			158	A Study on Wave Energy Conversion Problem of Turbine-Integrated OWC Chamber	Jenny-Seok Kim	10:15-10:30	
	Oteiza/Tidal hydrodynamic modelling	Tim O'Doherty	503	Large-eddy simulations of interaction between surface waves and a tidal turbine wake in a turbulent channel	Tim Stallard	09:00-09:15	
			195	Actuator-Line CFD Simulation of Tidal-Stream Turbines in a Compact Array	David Aspel	09:15-09:30	
			218	High-fidelity modeling of a vertical axis tidal turbine model under realistic flow conditions	Mikael Gondeau	09:30-09:45	
			307	Synthetic eddy generation and modelling of turbine operation in a turbulent tidal flow	Matteo Gregori	09:45-10:00	
367			A study on tidal rotors under the combined effects of currents and waves using actuator-line CFD simulations	Federico Zilic de Arcos	10:00-10:15		
							10:15-10:30
Refreshments, networking & posters exhibition (Terrace and Chillida room)						10:30-11:00	
Oral presentations	Baroja/ Wave device development and testing	Claes Eskilsson	127	Experimental evaluation of phase and velocity control for a optimised wave energy converter	Andrei Enelkov	11:00-11:15	
			169	Wave Energy Power Take-Off Validation with a Hydrodynamically Actuated Rotary Dynamometer and a Bi-directional High-power DC Supply: Methods for validating wave energy converter's mechanical and electrical power conversion systems	Casey Nichols	11:15-11:30	
			212	A Renewable elevated design wave generator for testing marine energy devices	Pedro Lomonaco	11:30-11:45	
			293	Wave energy converter power take-off characterisation: comparing dynamometer and field data	Curtis Rusch	11:45-12:00	
			446	Limiting the available pneumatic power in a U-OWC	João Henriques	12:00-12:15	
			562/57M	Two Rapid Prototyping Environments for Wave Energy Control	Alexandra Price	12:15-12:30	
	Laboa/ Tidal device development and testing	Alberto Peña	285	A methodology for developing a prediction model for the remaining fatigue life and residual strength of tidal turbine blades	Tennis Ranjita Munawera Thambrige	11:00-11:15	
			177	Multi-Actuator Full-Scale Fatigue Test of a Tidal Blade	Sergio Lopez Dubon	11:15-11:30	
			203	Experimental techniques for evaluating the performance of high-blockage cross-flow turbine arrays	Adnan Hunt	11:30-11:45	
			277	Observations from structural testing of tidal turbine blade blades	William Finnegan	11:45-12:00	
			322	Experimental flow conditions effects on a bottom-mounted ducted twin vertical axis tidal turbine compared to real sea conditions	Marin Moreau	12:00-12:15	
			498	Experimental comparison of the flow-induced loading between a ducted, bottom-mounted twin vertical axis tidal turbine at still and in turbulent conditions	Saouli	12:15-12:30	
	Arriaga/ Wave hydrodynamic modelling	Markel Peñaiba	496	General Characterization of Wave Power Absorption Characteristics in a Current Floating Platform	Thiago Saketani Hattak	11:00-11:15	
			628	Hydrodynamic and Static Stability Analysis of a Hybrid Offshore Wind-Wave Energy Generation: An Expansion of Semi-submersible Floating Wind Turbine Concept	Payam Abolbakh	11:15-11:30	
			626	Study with Large Eddy Simulations of energy dissipation due to backflow flow in wave overtopping	Claudio Sandoval	11:30-11:45	
			383	Nonlinear WEC modeling using Sparse Identification of Nonlinear Dynamics (SINDy)	Brittany Lydon	11:45-12:00	
			352	Numerical and Experimental Characterization of Rotational Floating Body Drag	Bryson Robertson	12:00-12:15	
			480	A management and validation of the in-house hydrodynamic codes and the DMV software for Tidal-OWC wave energy converter	Wenbin Shang	12:15-12:30	
	Oteiza/Tidal hydrodynamic modelling	Gustavo Esteban	416	A turbines-module adapted to the marine site for tidal farms layout optimization	Mikol Pucci	11:00-11:15	
			442	High-fidelity modelling of a six-turbine tidal array in the Shetlands	Pablo Otero	11:15-11:30	
			454	Infeasibilities in tidal turbine wakes	Amanda Smyth	11:30-11:45	
			505	On the accuracy of BEMT and CFD on the power and twist prediction of tidal turbines	Yabin Liu	11:45-12:00	
506			The performance of counter-rotating tidal turbines in different site status	Song Fu	12:00-12:15		
544			Comparison of Actuator Line Modelling of Tidal Power Kites with ADCP Measurements	Normal Prabhakar	12:15-12:30		
Lunch & posters exhibition (Terrace and Chillida room)						12:30-14:00	
Oral presentations	Baroja/ Wave device development and testing	Yago Torre-Enciso	242	Experimental investigation into the Air Compressibility Scaling Effect on OWC Performance and Wave Height	André P.L. Gouveia	14:00-14:15	
			185	Enhancing the efficiency of an axial impulse turbine with a diffuser	Geetam Saha	14:15-14:30	
			260	Numerical performance assessment of a new wave energy conversion system	André F. L. Gouveia	14:30-14:45	
			522	Basin testing of the 1:2-1 MW WEC	Damon Howe	14:45-15:00	
			451	Experimental Investigation on Performance of Counter-rotating Impulse Turbine with Middle Vanes for Wave Energy Conversion	Kichiro Suto	15:00-15:15	
			268	Design of an integrated generator and heaving buoy	Nick Baker	15:15-15:30	
	Laboa/ Tidal device development and testing	Daniel Coles	343	Designing Vortex Generators for Tidal Turbine Blades	Marinos Manolelos	14:00-14:15	
			366	A two-scale blockage correction for an array of tidal turbines	Daniel Dehyrlow	14:15-14:30	
			365	Performance Assessment of a Multi-Rotor Floating Tidal Energy System	Nicholas Kaufmann	14:30-14:45	
			391	The Influence of the Downstream Blade Design on Cross-Flow Turbine Performance	Abigail Shortland	14:45-15:00	
			404	Design and Demonstration of a Passive Pitch System for Tidal Turbines	Miguel González-Montolió	15:00-15:15	
			520	Design and Demonstration of a Passive Pitch System for Tidal Turbines	Stefano Gambuzza	15:15-15:30	
	Arriaga/ Wave hydrodynamic modelling	Sara Russo	184	New long-duration trials on Open Circular Caisson for Wave Energy Conversion in Waters with Medium Energy Density	Jiahui Hong Chen	14:00-14:15	
			513	System Identification for Modelling MW Wave Energy Converter	Xuefei Wang	14:15-14:30	
			196	Surge analysis and CFD simulations of a spherical floater	Spyridon Zafeiris	14:30-14:45	
			276	Structural-Domain Modelling of Wave Energy Converters as an Efficient Tool for Adjustment of PTD Model Parameters	Jian Tan	14:45-15:00	
			333	A multiquery analysis of a PnWEC farm	Beatrice Battisti	15:00-15:15	
			538	Effects of control strategies on the performance of floating WEC point absorbers operating attached to a breakwater by time-domain	Markos Borovas	15:15-15:30	
	Oteiza/Tidal hydrodynamic modelling	AbuBakr Bahaj	679	Experimental characterisation of the wake of a bottom-mounted twin tandem of cylinders placed in a high velocity wave	Alina Santa Cruz	14:00-14:15	
			676	Development of a modified BEMT model for the analysis of helical twisted vertical axis tidal turbines	Mohammad Fereidoonmehrad	14:15-14:30	
			199	A comparative study of power production using a generic empirical model in a tidal farm	Kabir Baghir Sharif	14:30-14:45	
			252	Objective Functions for the Blade Shape Optimisation of a Cross-Flow Tidal Turbine under Constraints	Karla Ruiz-Husmann	14:45-15:00	
283			Investigating the impact of multibody structure shadowing on tidal stream turbine performance	Bryn Townley	15:00-15:15		
501			A methodology to capture the single blade loads on a cross-flow tidal turbine flume model	Stefan Hoerner	15:15-15:30		
Refreshments, networking & posters exhibition (Terrace and Chillida room)						15:30-16:00	
Side events	Mixelena/Side event 4	SafeWAVE project (by AZTI / WavEC)				16:00-17:30	
	Baroja/Side event 5	Technology Performance Level Assessment (TPL) (by SANDIA LAB. -TPL TEAM-)				16:00-17:30	
	Arriaga/Side event 6	NEMMO Project, On the Cutting Edge of Tidal Blade Design and Materials (by Ocean Energy Europe)				16:00-17:30	
Oral presentations	Baroja/ Wave device development and testing	Luis Gato	318	A Novel Hybrid Floating Breakwater: Wave Energy Converter Driven: Preliminary Experimental Investigations	Sara Russo	17:30-17:45	
			329	Optimised/adaptive cdm design for wave energy conversion	Jingyi Yang	17:45-18:00	
			535	The Geometrical Design of the L-shaped Oscillating Water Column Using Artificial Neural Network	Chen-Chou Lin	18:00-18:15	
			274	Maximizing the surge amplitude of a floater through an adaptable mooring lightening technique	Andreas Aslirikis	18:15-18:30	
			516	Reliability and Cost Assessment of Critical Components: Electrical generation part of 100M wave energy converter	Julia Fernandez Chozas	18:30-18:45	
			286	Heterogeneous WEC array optimization using the Hidden Genetic Genetic Algorithm	Habeebullah AbdulKadir	18:45-19:00	
	Arriaga/ Wave hydrodynamic modelling	Jesus M. Blanco	355	Numerical investigation of a new hybrid floating tidal turbine concept	Beatrice Fenu	17:30-17:45	
			376	Quantification of uncertainty in linear wave energy hydrodynamic models from experimental data	Mahdiyeh Farayand	17:45-18:00	
			379	An overview of an experimental campaign for arrays of wave energy conversion systems	Nicolas Færevik	18:00-18:15	
			426	Robust verification of WECs: comparison of methods to estimate numerical uncertainties in the OEC wave energy modelling task	Claes Eskilsson	18:15-18:30	
			473	HydroCrown: An Open-Source Hydrodynamic Package for Project Closure	David Ogden	18:30-18:45	
			474	Robust hydrodynamic analysis of a heaving sphere in diffraction, radiation, and scattered waves	Jens Groschopp	18:45-19:00	
	Oteiza/ Tidal hydrodynamic modelling	Pablo Ruiz-Minguela	407	Modelling the effects of boundary proximity on a tidal rotor using the actuator disc method	Joe Edwards	17:30-17:45	
			464	Characterisation of turbulent flow and the wake of a tidal stream turbine in proximity to a ridge	Sulaiman Hurbis	17:45-18:00	
			566	Tidal turbulence in medium depth water, primarily a model study	Goran Brostrom	18:00-18:15	
			316	Verification and validation of blade-resolved viscous-flow tidal turbine simulations	Manuel Rentschler	18:15-18:30	
			544	Comparison of Actuator Line Modelling of Tidal Power Kites with ADCP Measurements	Normal Prabhakar	18:30-18:45	
	Technical programme	Eihoyar	Technical Committee meeting				19:00-20:00
	Social programme		Track Directors Dinner				20:00-22:00