

Tuesday September 5						
Registration (Main Hall)						
						08:00-09:00
Oral presentations	Room /Track	Chairman	Paper ID	Title	Presenter	
	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	Reliability of Robustness and Uncertainties Analysis in the Optimal Design of Wave Energy Converters	Filippo Girolacci	09:45-10:00
			178	Tuning Wave Energy Converters to local wave conditions	Wilson Guachaman-Azoro	10:00-10:15
			496	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	Integrate 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 oswat 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
	Arriaga/ Wave hydrodynamic modelling	Gareth Tomas	317	Verification and validation of ModHydro - A free simulation tool for modelling moored MRE 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
			497	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 converters within the open-source numerical framework of HAWC2	Alejandro Crespo	10:00-10:15
			168	A Study on Wave Energy Converter Problem of Turbine-Integrated OWC Chamber	Jenny Seok Kim	10:15-10:30
	Oleiza/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 Aspey	09:15-09:30	
218			High-fidelity modeling of a vertical axis tidal turbine model under realistic flow conditions	Mikael Grondreau	09:30-09:45	
307			Synthetic eddy generation and modelling of turbine operation in a turbulent tidal flow	Francesco Salvatore	09:45-10:00	
367			A study on tidal rotors under the combined effects of currents and waves using actuator-line CFD simulations	Federico Zili de Arcos	10:00-10:15	
334			Impact of lateral turbine spacing on the performance of a multi-rotor tidal energy device	Bryn Townley	10:15-10:30	
Refreshments, networking & posters exhibition (Terrace and Chillida room)						
						10:30-11:00
Oral presentations	Room /Track	Chairman	Paper ID	Title	Presenter	
	Baroja/ Wave device development and testing	Claes Eskilsson	197	Experimental evaluation of phase and velocity control for a cycloidal wave energy converter	Andrei Ermiakov	11:00-11:15
			169	Wave Energy Power Take-off Validation with a Hydraulic Actuated Rotary Dynamometer and a Bi-directional High-power DC Busbar: Methods for validating wave energy converter mechanical and electrical power conversion systems	Casey Nichols	11:15-11:30
			212	A Removable elevated-chimney 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 L-OWC	Joao Henriques	12:00-12:15
			499	HAWC2M: 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 Ranganj Munaweera Thanthirige	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	Arjan Hunt	11:30-11:45
			277	Observations from structural testing of full-scale tidal turbine 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	Martin 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 uniform currents	Saouli	12:15-12:30
	Arriaga/ Wave hydrodynamic modelling	Markel Peñaalba	496	Dynamic Simulation of Wave Point Absorbers Connected to a Common Floating Platform	Thiago Sakamaki Hatake	11:00-11:15
			628	Hydrodynamic and Static Stability Analysis of a Hybrid Offshore Wind-Wave Energy Converter: An Expansion of Semi-rigidly Floating Wind Turbine Concepts	Payam Aboulkhalil	11:15-11:30
			626	Study on Large Eddy Simulations of energy dissipation due to bedrock flow in wave overlapping	Claudio Sandoval	11:30-11:45
			383	Nonlinear WEC modeling using Sparse Identification of Nonlinear Dynamics (SINDy)	Billyann Lyden	11:45-12:00
			392	Nominal and Experimental Characterization of Rotational Floating Body Drag	Bryson Robertson	12:00-12:15
			490	A development and validation of the software hydrodynamic code and the PTO software for TADIS wave energy converter	David Ogden	12:15-12:30
	Oleiza/Tidal hydrodynamic modelling	Gustavo Eskelban	416	A turbines module adapted to the marine site for total 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			Instabilities in tidal turbine wakes	Anna Young	11:30-11:45	
505			On the accuracy of BEMT and CFD on the power and trust prediction of tidal turbines	Ignacio Maria Viola	11:45-12:00	
506			The performance of counter-rotating tidal turbine in different sea states	Cameron Johnstone	12:00-12:15	
544			Comparison of Actuator Line Modelling of Tidal Power Kites with ADCP Measurements	Nomai Prabahar	12:15-12:30	
Lunch & posters exhibition (Terrace and Chillida room)						
						12:30-14:00
Oral presentations	Room /Track	Chairman	Paper ID	Title	Presenter	
	Baroja/ Wave device development and testing	Yago Torre-Enciso	242	Experimental Investigation into the Air Compressibility Scaling Effect on OWC Performance and Wave Height	Andre F.L. Gouveia	14:00-14:15
			185	Enhancing the efficiency of an axial impulse turbine with a diffuser	Geelam Sahai	14:15-14:30
			260	Numerical performance assessment of a new wave energy conversion system	Andre F. L. Gouveia	14:30-14:45
			522	Basin testing of the 1:2-1 M4 WEC	Hugh Wolgamot	14:45-15:00
			451	Experimental Investigation on Performance of Counter-rotating Impulse Turbine with Middle Vanes for Wave Energy Conversion	Kichiro Sato	15:00-15:15
			298	Design of an integrated generator and housing body	Nick Baker	15:15-15:30
	Laboa/ Tidal device development and testing	Daniel Coles	343	Designing Vortex Generators for Tidal Turbine Blades	Marinos Manolesos	14:00-14:15
			366	A two-scale blockage correction for an array of tidal turbines	Daniel Dehtyriov	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 Sweep on Cross-Flow Turbine Performance	Abigale Snorland	14:45-15:00
			420	Additive Manufacturing for Powering the Blue Economy Applications: A Tidal Turbine Blade Case Study	Miguel Gonzalez-Montijo	15:00-15:15
			504	Design and Demonstration of a Passive Pitch System for Tidal Turbines	Stefano Gambuzza	15:15-15:30
	Arriaga/ Wave hydrodynamic modelling	Sara Russo	164	Wave Attenuation based on Open Chamber Concept for Wave Energy Conversion in Harbours with Medium Energy Density	Jiahui-Hong Chen	14:00-14:15
			513	System Identification for Modelling M4 Wave Energy Converter	Xueli Wang	14:15-14:30
			198	Semi-analytical and CFD Simulations of a spherical floater	Spyridon Zafeiris	14:30-14:45
			278	Special-Order Modelling of Wave Energy Converters as an Efficient Tool for Adjustment of PTO Model Parameters	Jian Tan	14:45-15:00
			333	A multiphysics analysis of a PaveEC farm	Beatrice Balbi	15:00-15:15
			536	Effects of control strategies on the performance of floating WEC point absorbers operating attached to a breakerbar by time-varying devices	Markos Bonavolas	15:15-15:30
	Oleiza/Tidal hydrodynamic modelling	AbuBakr Bahaj	579	Experimental characterisation of the wake of a bottom-mounted two tandem of cylinders placed in a high velocity area	Alina Santa Cruz	14:00-14:15
676			Development of a modified BEMT model for the analysis of helical blades vertical axis tidal turbines	Mohammad Fereidoonmehdi	14:15-14:30	
199			A comparative study of power production using a generic empirical model in a tidal farm	Kabir Bashir Sherif	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 multi-rotor 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 farm 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	Room /Track	Chairman	Paper ID	Title	Presenter	
	Baroja/ Wave device development and testing	Luis Galo	318	A Novel Hybrid Floating Breakwater-Wave Energy Converter Device: Preliminary Experimental Investigations	Sara Russo	17:30-17:45
			329	Original-adapted clam design for wave energy conversion	Jingyi Yang	17:45-18:00
			555	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 lightning technique	Andreas Aslaks	18:15-18:30
			516	Reliability and Cost Assessment of Critical Components: Electrical generator failure of OCM wave energy converter	Julia Fernandez Chozas	18:30-18:45
			269	Heterogeneous WEC array optimization using the Hidden Genetic Genetic Algorithm	Ossama Abdelkhalik	18:45-19:00
	Arriaga/ Wave hydrodynamic modelling	Jesús M. Blanco	355	Numerical investigation of a new hybrid floating wind turbine concept	Beatrice Fenu	17:30-17:45
			376	Quantification of uncertainty in linear wave energy hydrodynamic models from experimental data	Mahdiyeh Faragani	17:45-18:00
			379	An overview of an experimental campaign for arrays of wave energy conversion systems	Nicolas Faedo	18:00-18:15
			426	Solution verification of WECs: comparison of methods to estimate numerical uncertainties in the OES wave energy modelling task	Claes Eskilsson	18:15-18:30
			473	HydroChemo: An Open-Source Hydrodynamics Package for Project Chemo	David Ogden	18:30-18:45
			474	Nonlinear hydrodynamics of a heaving sphere in diffraction, radiation, and combined tests	Jana Orszagova	18:45-19:00
	Oleiza/ Tidal hydrodynamic modelling	Pablo Ruiz-Minguela	497	Modelling the effects of boundary proximity on a tidal rotor using the simulation box method	Hyon Edwards	17:30-17:45
			464	Characterisation of turbulent flow and the wake of a tidal stream turbine in proximity to a ridge	Suleiman Hurbid	17:45-18:00
			566	Tidal turbulence in medium depth water, primarily a model study	Göran Broström	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	Nomai Prabahar	18:30-18:45
	Technical programme	Elkoyar	Technical Committee meeting			
Social programme		Track Directors Dinner				20:00-22:00