

Tuesday September 5							
08:00-09:00	Registration (Main Hall)					08:00-09:00	
09:00-10:30	Oral presentations	Room /Track	Chairman	Paper ID	Title	Presenter	
		Baroja/ Wave device development and testing	Diego Vicianza	138	Analysis of Mutliti'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	Relevance of Robustness and Uncertainties Analysis in the Optimal Design of Wave Energy Converters	Filippo Giorcelli	09:45-10:00
				176	Tuning Wave Energy Converters to local wave conditions	Wilson Guachamin-Azoro	10:00-10:15
				465	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 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
							10:15-10:30
	Arriaga/ Wave hydrodynamic modelling	Gareth Tomas	317	Verification and validation of ModuMarine - A free simulation tool for modelling moored WRE 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	Ordine Lynggaard Hansen	09:30-09:45	
			145	On the state-of-the-art of CFD simulations for wave energy converter within the open-source numerical framework of OpenFOAM	Alejandro Crespo	09:45-10:00	
			158	A Study on Wave Energy Conversion Potential of Turbine Integrated OWC Chamber	Jeong-Seok Kim	10:00-10:15	
							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 Aspey	09:15-09:30	
			218	High-fidelity modeling of a vertical axis tidal turbine model under realistic flow conditions	Mikael Grondelle	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
11:00-12:30	Oral presentations	Room /Track	Chairman	Paper ID	Title	Presenter	
		Baroja/ Wave device development and testing	Claes Eskilsson	167	Experimental evaluation of phase and velocity control for a cylindrical wave energy converter	Andrei Ermakov	11:00-11:15
				189	Wave Energy Power Take-Off Validation with a Hydraulic Actuated Rotary Dynamometer and a Bi-directional High-power DC Supply: Methods for validating wave energy converter mechanical and electrical power conversion systems	Casey Nichols	11:15-11:30
				212	A Removable elevated-hinge wave generator for testing marine energy devices	Pedro Lomonaco	11:30-11:45
				293	Wave energy converter power take-off characterization: comparing dynamometer and field data	Curtis Rusch	11:45-12:00
				443	Limiting the available pneumatic power in a U-OWC	Joao Henriques	12:00-12:15
				492	WANDYM: Two-Phase Preprocessing 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	Tenris Rangan Munaweera Thambirige	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	Marlin 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 incident conditions	Saouli	12:15-12:30	
	Arriaga/ Wave hydrodynamic modelling	Markel Perlañza	496	Dynamic Simulation of Wave Park Absorbers Connected to a Central Floating Platform	Thiago Sakamaki Hallak	11:00-11:15	
			428	Hydrodynamic and Static Stability Analysis of a Hybrid Offshore Wind-Wave Energy Generation: An Expansion of Semi-rigidizable Floating Wind Turbine Concept	Payan Aboulkhalil	11:15-11:30	
			426	Study with Large Eddy Simulations of energy dissipation due to backwash flow in wave overtopping	Claudio Sandoval	11:30-11:45	
			383	Nonlinear WEC modeling using Sparse Identification of Nonlinear Dynamics (SINDy)	Brittany Lyden	11:45-12:00	
			292	Numerical and Experimental Characterization of Rotational Floating Body Drift	Bryson Robertson	12:00-12:15	
			465	A Development and Validation of the in-house hydrodynamic code and the BEM software for TACOS wave energy converter	David Ogden	12:15-12:30	
	Oteiza/Tidal hydrodynamic modelling	Iñigo Bidaguren	416	A turbine-module adapted to the marine site for tidal farm layout optimization	Mikol Pucci	11:00-11:15	
			442	High-fidelity modeling 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	Ignazio 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 Modeling of Tidal Power Kits with ADCP Measurements	Nomai Prabahar	12:15-12:30		
Lunch & posters exhibition (Terrace and Chillida room)							12:30-14:00
14:00-15:30	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	Nadav Cohen	14:00-14:15
				185	Enhancing the efficiency of an axial impulse turbine with a diffuser	Geetan 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	Beam 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 Mobile Vanes for Wave Energy Conversion	Kichiro Sato	15:00-15:15
				256	Design of an integrated generator and heaving buoy	Nick Baker	15:15-15:30
		Laboa/ Tidal device development and testing	Daniel Coles	366	A two-scale blockage correction for an array of tidal turbines	Daniel Dehtyriov	14:00-14:15
				365	Performance Assessment of a Multi-Rotor Floating Tidal Energy System	Nicholas Kaufmann	14:15-14:30
				391	The Influence of the Downstream Blade Sweep on Cross-Flow Turbine Performance	Abigale Snortland	14:30-14:45
				420	Advanced Manufacturing for Powering the Blue Economy Applications: A Tidal Turbine Blade Case Study	Miguel Gonzalez-Montijo	14:45-15:00
				504	Design and Demonstration of a Passive Pitch System for Tidal Turbines	Stefano Gambuzza	15:00-15:15
							15:15-15:30
	Arriaga/ Wave hydrodynamic modelling	Sara Russo	164	Wave Amplification inside an Open Circular Cavity for Wave Energy Conversion in Waters with Medium Energy Density	Jahn-Hong Chen	14:00-14:15	
			513	System Identification for Modeling M4 Wave Energy Converter	Xueli Wang	14:15-14:30	
			198	Three-dimensional and CFD Simulations of a spherical Rotor	Spyridon Zafeiris	14:30-14:45	
			278	Spectral-Domain Modeling of Wave Energy Converters as an Efficient Tool for Adjustment of FEM Model Parameters	Antonio Jaquín Lagares	14:45-15:00	
			333	A multiphase analysis of a PAMEC farm	Beatrice Balbi	15:00-15:15	
			536	Effects of control strategies on the performance of floating WEC point absorbers operating attached to a breakwater by time-domain	Marlene Bonnavas	15:15-15:30	
	Oteiza/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 biased vertical axis tidal turbines	Mohammad Fereidoonshad	14:15-14:30	
			199	A comparative study of power production using a generic empirical model in a tidal farm	Kabir Bashir Sharif	14:30-14:45	
			252	Objective Functions for the Blade Shape Optimization of a Cross-Flow Tidal Turbine under Constraints	Karla Ruiz-Huesman	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
16:00-17:30	Side events	Mixelena/Side event 3	"SUPPORTING THE FUTURE OF OCEAN ENERGY HERE AND NOW; A GLIMPSE OF BASQUE PUBLIC INITIATIVES TO FOSTER SECTOR SCALE-UP" (by EVE)			16:00-17:30	
		Baroja/Side event 4	Technology Performance Level Assessment (TPL) (by SANDIA LAB. -TPL TEAM-)			16:00-17:30	
		Arriaga/Side event 5	NEMMO Project, On the Cutting Edge of Tidal Blade Design and Materials (by Ocean Energy Europe)			16:00-17:30	
17:30-19:00	Oral presentations	Room /Track	Chairman	Paper ID	Title	Presenter	
		Baroja/ Wave device development and testing	Luis Gato	318	A Novel Hybrid Floating Breakwater-Wave Energy Converter Device: Preliminary Experimental Investigations	Sara Russo	17:30-17:45
				329	Optimized-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	Measuring the surge amplitude of a floater through an adjustable mooring tightening technique	Andreas Aslaks	18:15-18:30
				516	Reliability and Cost Assessment of Critical Components: Electrical generator failure of ICOM wave energy converter	Julia Fernandez Chozas	18:30-18:45
				298	Heterogeneous WEC array optimization using the Hidden Genes Genetic Algorithm	Ossama Abdelrhakim	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 Faragmand	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 modeling task	Claes Eskilsson	18:15-18:30
				473	HydroChorus: An Open-Source Hydrodynamics Package for Project Chorus	David Ogden	18:30-18:45
				474	Nonlinear hydrodynamics of a heaving sphere in diffraction, radiation, and combined tests	Jana Orzechowska	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 line method	Huw Edwards	17:30-17:45
				464	Characterisation of turbulent flow and the wake of a tidal stream turbine in proximity to a ridge	Sulaiman Huruji	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 Rentchler	18:15-18:30
				544	Comparison of Actuator Line Modeling of Tidal Power Kits with ADCP Measurements	Nomai Prabahar	18:30-18:45
						18:45-19:00	
19:00-20:00	Technical programme	Elhuyar	Technical Committee meeting			19:00-20:00	
20:00-22:00	Social programme		Track Directors Dinner			20:00-22:00	