

	Tuesday September 5						
08:00-09:00	Registration (Main Hall)						08:00-09:00
		Room /Track	Chairman	Paper ID	Title Analysis of Mutriks's OWC performance	Presenter Isabel Casas	09:00-09:15
09:00-10:30		Raroia/	: Diego Vicinanza	144 266	Successful innovation strategies to overcome the technical challenges in the development of wave energy technologies Spatial focussing of wave energy for improved power capture by an oscillating water column	Pablo Ruiz-Minguela Robert Mayon	09:15-09:30 09:30-09:45
		Baroja/ Wave device development and testing		352	Relevance of Robustness and Uncertainties Analysis in the Optimal Design of Wave Energy Converters	Filippo Giorcelli	09:45-10:00
				176 466	Tuning Wave Energy Converters to local wave conditions Enabling the Ocean Internet of Things with Renewable Marine Energy	Wilson Guachamin-Acero Mathew Topper	10:00-10:15 10:15-10:30
		Laboa/ Tidal device development and testing	Stephanie Ordoñez-Sanchez	166 209	Intracycle Active Blade Pitch Control for Cross-Flow Tidal Turbines Using Embedded Electric Drive Systems Numerical optimization of the active lift turbines using OpenFoam's overset method	Zhao Zhao Ilan Robin	09:00-09:15 09:15-09:30
				231 264	Non-dimensional scaling of passive adaptive blades for a marine current turbine Optimal Design of a Submerged Tistal Device for Low Current Environment	Katherine Van Ness Seoung-won Jeong	09:30-09:45 09:45-10:00
	Oral			343	Designing Vortex Generators for Tidal Turbine Blades	George Papadakis	10:00-10:15
	presentations			317	Verification and validation of MoodyMarine - A free simulation tool for modelling moored MRE devices	Johannes Palm	10:15-10:30 09:00-09:15
		Arriaga/ Wave hydrodynamic modelling	Gareth Tomas	321 476	A hybrid linear potential flow - markine learning model for enhanced prediction of WEQ performance Design Wave analysis of the M4 wave energy converter device	Claes Eskilsson Cristine Lynggard Hansen	09:15-09:30 09:30-09:45
				145 158	On the state of the-art of OFD simulations for wave energy converters within the open-source numerical framework of Dual SPHysics	Alejandro Crespo Jeong-Seok Kim	09:45-10:00 10:00-10:15
					A Budy Oil Wark Energy Conversion Frockett of Total Contenting paids OVIC Chamber		10:15-10:30
		Oteiza/Tidal hydrodynamic modelling	Tim O'Doherty	503 195	Large-eddy simulations of interaction between surface waves and a tidal turbine wake in a turbulent channel Actuator-Line CFD Simulation of Tidal-Stream Turbines in a Compact Array	Tim Stallard David Apsley	09:00-09:15 09:15-09:30
				218 307	High-fidelity modeling of a vertical axis tidal turbine model under realistic flow conditions Synthetic eddy generation and modelling of turbine operation in a turbulent tidal flow	Mikaël Grondeau Francesco Salvatore	09:30-09:45 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
			Ref	334 freshments,	Impact of lateral turbine spacing on the performance of a multi-rotor tidal energy device networking & posters exhibition (Terrace and Chillida room)	Bryn Townley	10:15-10:30 10:30-11:00
11:00-12:30		Room /Track	Chairman	Paper ID 167	Title Experimental evaluation of phase and velocity control for a cyclorotor wave energy converter	Presenter Andrei Ermakov	11:00-11:15
		Baroja/ Wave device development and testing	Claes Eskilsson	169	Wave Energy Power Take-off Validation with a Hydraulicly Actuated Rotary Dynamometer and a Bi-directional High-power DC Supply: Methods for validating wave energy conveniens' mechanical and electrical power conversion systems. A Removable electricated chine wave negative for techni	Casey Nichols Pedro Lomonaco	11:15-11:30
				212 293	A Removable elevated-hinge wave generator for testing marine energy devices Wave energy converter power take-off characterization: comparing dynamometer and field data	Curtis Rusch	11:30-11:45 11:45-12:00
				448 499	Limiting the available pneumatic power in a U-OWC HAPKSYM. Two Rapid Prototyping Environments for Wave Energy Control	Joao Henriques Alexandra Price	12:00-12:15 12:15-12:30
		Laboa/ Tidal device development and testing	Alberto Peña	285 177	A methodology for developing a prediction model for the remaining fatigue life and residual strength of tidal turbine blades Muth-Actuator Full-Scale Fatigue Test of a Tidal Blade	Tenis Ranjan Munaweera Thanthirige Sergio Lopez Dubon	11:00-11:15 11:15-11:30
				203	Experimental techniques for evaluating the performance of high-blockage cross-flow turbine arrays	Aidan Hunt	11:30-11:45
	Oral presentations			277 322	Observations from structural testing of ful-scale tidal turbine blades Experimental flow conditions effects on a bottom-mounted ducted twin vertical axis tidal turbine compared to real sea conditions	William Finnegan Martin Moreau	11:45-12:00 12:00-12:15
				498 496	Eppermental compasson of the flow-induced loading between a ducted bottom-mounted fain vertical axis tidal turbine at still and an unducted enrothing or an authorized enrothing to the still and an unducted enrothing by the still and an unducted enrothing the still and an unducted or a central Floating Platform	Saouli Thiago Saksanian Hallak	12:15-12:30 11:00-11:15
		Arriaga/ Wave hydrodynamic modelling	Markel Peñalba	628	Hydrodynamic and Static Stabity Analysis of a Hybrid Offshore Wind-Wave Energy Generation: An Expansion of Semisubmersible Roating Wind Turbine Concept	Payam Aboutalebi Claudio Sandoval	11:15-11:30
				626 383	Study with Large Eddy Simulations of energy dissipation due to backwash flows in wave overlopping Nonlinear WEC modeling using Sparse Identification of Nonlinear Dynamics (SNDy)	Brittany Lydon	11:30-11:45 11:45-12:00
				392 460	Numerical and Experimental Characterization of Rotational Floating Body Drag A development and validation of the in-house hydrodynamics code and the DNV software for TALOS wave energy convener	Bryson Robertson David Ogden	12:00-12:15 12:15-12:30
		Oteiza/Tidal hydrodynamic modelling	Migo Bidaguren	416	A turbines-module adapted to the marine site for tidal farms layout optimization	Mikol Pucci	11:00-11:15
				442 454	High-fidelity modelling of a six-turbine tidal array in the Shetlands Instabilities in tidal turbine wakes	Pablo Ouro Anna Young	11:15-11:30 11:30-11:45
				505 506	On the accuracy of BEMT and CFD on the power and trust prediction of tidal turbines The performance of counter-rotating tidal turbine in different sea states	Ignazio Maria Viola Cameron Johnstone	11:45-12:00 12:00-12:15
				544	Comparison of Actuator Line Modelling of Tidal Power Kites with ADCP Measurements	Nomal Prabahar	12:15-12:30
12:30-14:00					Lunch & posters exhibition (Terrace and Chillida room)		12:30-14:00
		Room /Track	Chairman	Paper ID	Title	Presenter	
14:00-15:30		Baroja/ Wave device development and testing	Yago Torre-Enciso	242 185	Experimental Investigation into the Air Compressibility Scaling Effect on CWC Performance and Wave Height Enhancing the efficiency of an axial impulse turbine with a diffuser	André F.L. Governo Geetam Saha	14:00-14:15 14:15-14:30
				260	Numerical performance assessment of a new wave energy conversion system	André F. L. Governo	14:30-14:45
				522 451	Basin testing of the 1-2-1 M4 WEC Experimental Investigation on Performance of Counter-rotating Impulse Turbine with Middle Vanes for Wave Energy Conversion	Hugh Wolgamot Kichiro Suto	14:45-15:00 15:00-15:15
		Laboa/ Tidal device development and testing	Daniel Coles	268 366	Design of an integrated generator and heaving buoy A two-scale blockage correction for an array of tidal turbines	Nick Baker Daniel Dehtyriov	15:15-15:30 14:00-14:15
				365 391	Performance Assessment of a Multi-Rotor Floating Tidal Energy System The Influence of the Downstream Blade Sweep on Cross-flow Turbine Performance	Nicholas Kaufmann Abigale Snortland	14:15-14:30 14:30-14:45
	Oral presentations			420	Additive 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	164 513	Wave Amplification inside an Open Circular Calsson for Wave Energy Conversion in Waters with Medium Energy Density System Identification for Modeling M4 Wave Energy Converter*	Jiahn-Homg Chen Xuefei Wang	14:00-14:15 14:15-14:30
				198	Semi-analytical and CFD formulations of a spherical floater	Spyridon Zafeiris	14:30-14:45
				278 333	Spectral Domain Modelling of Wave Energy Conventers as an Efficient Tool for Adjustment of PTO Model Parameters A multiquery analysis of a PeWEC farm	Antonio Jarquin Laguna Beatrice Battisti	14:45-15:00 15:00-15:1
		Oteiza/Tidal hydrodynamic modelling	AbuBakr Bahaj	538 579	Effects of control strategies on the performance of floating WEC point absorbers operating attached to a breakwater by time-domal Experimantal characterisation of the wake of a bottom-mounted two tandem of cylinders placed in a high velocity area	Markos Bonovas Alina Santa Cruz	15:15-15:30 14:00-14:15
				676 199	Development of a modified BEMT model for the analysis of helical bladed vertical axis stial turbines A comparative study of power production using a generic empirical model in a stial farm	Mohammad Fereidoonnezhad	14:15-14:30 14:30-14:45
				252	Objective Functions for the Blade Shape Optimisation of a Cross-Flow Tidal Turbine under Constraints	Kabir Bashir Shariff Karla Ruiz-Hussmann	14:45-15:00
				283 501	Investigating the impact of multi-notor structure shadowing on tidal stream turbine performance. A methodology to capture the single blade loads on a cross-flow tidal turbine flume model	Bryn Townley Stefan Hoerner	15:00-15:15 15:15-15:30
15:30-16:00	Sieran Hoerner						
		Mitxelena/Side event 4	"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
16:00-17:30	Side events						
		Baroja/Side event 5			Technology Performance Level Assessment (TPL) (by SANDIA LABTPL TEAM-)		16:00-17:30
		Arriaga/Side event 6		NEMMO	Project, On the Cutting Edge of Tidal Blade Design and Materials (by Ocean Energy Europ	oe)	16:00-17:30
17:30-19:00		Room /Track	Chairman	Paper ID	Title	Presenter	
		Baroja/ Wave device development and testing	Luis Gato	318 329	A Novel Hybrid Floating Breakwater-Wave Energy Converter Device: Preliminary Experimental Investigations Organi-adapted claim design for wave energy conversion	Sara Russo Jingyi Yang	17:30-17:45 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
	Oral presentations			274 516	Maximizing the surge amplitude of a floater through an adaptable mooring fightening technique Reliability and Cost Assessment of Critical Components: Electrical generator failure of IDOM wave energy converter	Andreas Asiikkis Julia Fernandez Chozas	18:15-18:30 18:30-18:45
		Arriaga/ Wave hydrodynamic modelling	Jesús M. Blanco	286 355	Heterogeneous WEC array optimization using the Hidden Genes Genetic Algorithm Numerical investigation of a new hybrid fleating wind turbine concept	Ossama Abdelkhalik Beatrice Fenu	18:45-19:00 17:30-17:45
				376 379	Quantification of uncertainty in linear wave energy hydrodynamic mode's from experimental data.	Mahdiyeh Farajvand Nicolas Faedo	17:45-18:00 18:00-18:15
				426	An overfloation of WECs: comparison of methods to estimate numerical uncertainties in the CEB wave energy modeling task.	Claes Eskilsson	18:15-18:30
				473 474	HydroChrone: An Open-Source Hydrodynamics Package for Project Chrono Nonlinear hydrodynamics of a heaving sphere in diffraction, radiation, and combined tests	David Ogden Jana Orszaghova	18:30-18:45 18:45-19:00
		Oteiza <i>l</i> Tidal hydrodynamic modelling	Pablo Ruiz-Minguela	407 464	Modelling the effects of boundary proximity on a tidal rotor using the actuator line method Characterisation of furbulent flow and the wake of a tidal steam furbine in proximity to a ridge	Huw Edwards	17:30-17:45 17:45-18:00
				566	Tidal turbulence in medium depth water, primarily a model study	Sulaiman Hurubi Göran Broström	18:00-18:15
				316 544	Verification and validation of blade-resolved viscous-flow tidal turbine simulations Comparison of Actuator Line Modelling of Tidal Power Kites with ADCP Measurements	Manuel Rentschler Nomal Prabahar	18:15-18:30 18:30-18:45
19:00-20:00	Technical	Elhuyar			Technical Committee meeting		18:45-19:00 19:00-20:00
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20:00-22:00	Social programme						
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