

9:00				Thursday September 7	
				Registration (Main Hall)	
	Room /Track	Chairman	Paper ID	Title	Presenter
		Joao Henriques	472	A time domain approach for the optimal control of wave energy converter arrays Optimisation of Air turbines for OWC Wave Energy Converters: Sensitivity of Realistic Wave	Mohamed Shabara
	Laboa/		493 500	Climates Climates Integrated hydrodynamic-electrical hardware model for wave energy conversion with M4	Ander Zarketa-Astigarraga
	Grid integration, power take-off and control		409	ocean demonstrator On data-based control-oriented modelling applications in wave energy systems	Judith Apsley Edoardo Pasta
Oral presentations			592	The Performance evaluation of 30kW class OWC wave power plant integrated with breakwater	Kilwom Kim
			161	investigation on the extreme peak mooring force distribution of a point absorber wave energy converter with and without a survivability control system	Zahra Shahroozi
	Arriaga/ Wave resource characterization	Joannes Berque	140	Analysis of the North Atlantic offshore energy flux from different reanalysis and hindcasts	Matias Alday
			175	Wave Spectral Analysis for designing Wave Energy Converters Long term wave load trends against offshore monopile structures: A case study in the Bay of	Jesus Portilla-Yandun Nahia Martinez-Iturricastillo
			275 279	Biscay Numerical modelling of wave and tidal current interactions and their impact on wave	Tian Tan
			205	parameters On the errors in annual energy yield estimation due to monodirectional wave spectra assumption	Giuseppe Giorgi
			305	Validation of ERA5 Wave Energy Flux through Sallor diagram in Spain (2005-2014)	Alain Ulazia
	Oteiza/ Economical, social, legal and political aspects of ocean energy	Pablo Ruiz-Minguela	154	Do recent renewable energy policy changes in Ireland satisfy the requirements of a nascent wave energy technology development sector? Interactions of upon perceivable Sectors?	Carrie Anne Barry
			157	Integration of wave energy into Energy Systems: an insight to the system dynamics and ways forward Can Risk-Based Approaches benefit future Marine Renewable Energy deployment, planning	George Lavidas Emma Verling
			306 351	and consenting processes? Towards increased social acceptability of marine renewable energy	Niall P. Dunphy
			362	Environmental Effects of MRE: Advancing the Industry through Broad Outreach and Engagement	Deborah Rose
-11:00	T		1	g & posters exhibition (Terrace and Chillida room)	
	Room /Track	Chairman	Paper ID 453	Title	Presenter Carrie Hall
		Lirko izguierdo	453		Yerai Peña-Sanchez
	Baroja/		548	A new seawater low-head turbine for the OBREC	Sara Russo
	Wave device development and testing	Urko Izquierdo	549	Experimental investigation on the hydrodynamic performance of a pile-supported OWC-type breakwater	Yusuf Almalki
			661		Michael O'Shea
			170	Wave Excitation Tests on a Fixed Sphere: Comparison of Physical Wave Basin Setups Wave Farms Integration in a 100% renewable isolated small power system -frequency stability	Jacob Andersen
	Laboa/ Grid integration, power take-off and control	Eider Robles	215 309	wave Farms integration in a 100% enrewable solated small power system -nequency subility and grid compliance analysis. Wave-to-Wire Control of an Oscillating Water Column Wave Energy System Equipped with a Wells Turbine	Marcos Blanco Marco Rosati
			309 510	Maximizing Wave Energy Converter Power Extraction by Utilizing a Variable Negative	Carlos Michelen
			561	Stiffness Magnetic Spring Development of control strategies for novel systems of a full scale OWC for the WEDUSEA project	James Kelly
:00-12:30 Oral presentations			346	Enhancing energy system resilience using tidal stream energy	Danny Coles
			551	Analysis of Ocean Energy Integration in Ibero-American Electric Grids	Marcos Lafoz
	Arriaga/ Wave resource characterization	Jesús M. Blanco	529 539	Impact of Resource Uncertainties on the Design of Wave Energy Converters Discussions on Wave energy period in higher wave energy potential marine waters of Taiwan	Markel Peñalba Shiaw-Yih Tzang
			159	Internal waves: A potentially untapped marine energy resource	Kastubha Raghukumar
			197	Feasibility of wave energy harvesting in the Ligurian Sea	Manuel Alejandro Corrales-González
			378	Identification of optimal sites for the deployment of wave energy converters: the importance of a technology-centred approach	Riccardo Novo
				Technologoania estimization of an effektory hybrid environmetery. Amentica, Bosin esse	
	Oteiza/ Economical, social, legal and political aspects of	Yago Torre-Enciso	399	Techno-economic optimization of an offshore hybrid power system: Argentine Basin case study Economic Basilinance in Oceano Economy Bayter A Suprey of Ochomocythy Moceynon	Sarah Palmer Thalita Nazare
			452 340	Ensuring Resilience in Ocean Energy Power Plants: A Survey of Cybersecurity Measures On the complementarity of wave, tidal, wind and solar resources in Ireland	Hafiz Ashan Said
			335	A comparison of the European Regulatory Framework for the deployment of Wave Energy	Hafiz Ashan Said Claudio Moscoloni
	ocean energy		507	Conventers Ocean Energy: Markets – Currency – Impact. Dimension of & Choices in the Technology Development Space	Jochem Weber
			397	Informing development of a socioeconomic data collection toolkit for marine energy: a literature review	Deborah Rose
-14:00				.unch & posters exhibition Terrace and Chillida room)	
-14:00	Room /Track	Chairman			Presenter
-14:00	Room /Track	Chairman	(1	Tetrace and Chillida room) Title Performance enhancement of pliching VECs via osoliating water columns technology	Presenter Marco Fontana
-14:00		Chairman	(1 Paper ID 350 357	Title Performance enhancement of pitching VECs via osolitating water columns technology Numerical investigation of the energy performance of a wave energy converter comprising a multibody power late-off	Marco Fontana Félix Elefant
-14:00	Baroja/ Wave device development	Chairman	(1 Paper ID 350 357 395	Tetrace and Chillida room) Title Performance enhancement of pliching WEGs via casoliating water columns technology Numetical investigation of the energy performance of a wave energy converter comprising a multibody power take-off Hyndi wind-awve systems: The case of the VoltumUS-S semi-submersible platform	Marco Fontana Félix Elefant Maximilian Hengstmann
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14:00	Baroja/ Wave device development		(1 Paper ID 350 357 395 439	Terrace and Chillida room) Title Performance enhancement of pitching VECs via occlusting water columns technology Numberly converties of the energy performance of a wave energy conventer comprising a hybrid wind wave systems. The case of the VolturuUS-5 series ubmensible platform Analysis of the valetity of a radiat Double Docker Turche for application in Ocellaring Water Concentry Conventer Anchetypes Have Bethod for Characterizing and Comparing Wave Energy Conventer Anchetypes	Marco Fontana Félix Elefant Maximilian Hengstmann Aitor Vega-Valladares
	Baroja/ Wave device development and testing		(1 Paper ID 350 357 395 439 445 	Title Performance enhancement of pliching VMECs via oscillating water columns technology Numerical investigation of the energy performance of a wave energy converter comprising a multi-body power tak-off. Hybrid wind wave systems: The case of the VoltumUS-S seni-submensible platform Analysis of the values of a mail be becker Turbine for application in Dicelliting Water Column devices An Early Degin Phase Method for Characterizing and Comparing Wave Energy Converter Archeypes Usampling wave temporal nebulation investigging wave parameters and the influence on the Copper performance. Os gastal interpolation of column energy dounce variables: A comparate energies	Marco Fontana Félix Elefant Maximilian Hengstmann Altor Vega-Valladares Aeron Roach Hannah Man&e Leonardo Gentharelli
-14:00 -15:30 oral presentation:	Baroja/ Wave device development and testing Arriaga/ Wave resource		(1 Paper ID 350 357 395 439 445 445 619 475	Tereace and Chillida room) Title Performance enhancement of pitching WECs via osolitating water columns technology Numerical investigation of the energy performance of a wave energy converter comprising a millibody power late-off. Hydrid Mind wave systems: The case of the VoltumUS-3 sens-submersheb patrom Hydrid Mind wave systems: The case of the VoltumUS-3 sens-submersheb patrom Analysis of the voltub of the and Double Decker Turbine for application in Oscillating Water Column devices An Entry Design Phase Method for Charactericiting and Comparing Wave Energy Converter Archetypes Usea mpling wave inergoid resolution: Investigating wave parameters and the inhumes an Dir spatial interpolation of clean energy source valiables: A congestate analysis The spatial interpolation of clean energy source valiables: A congestate analysis	Marco Fontana Félix Elefant Maximilian Hengstmann Altor Vega-Valladares Aeron Roach Hannah Mankio Leonardo Gambarelli Natalia Sergienko
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I-15:30 Presentation Presentation	Baroja/ Wave device development and testing Arriaga/ Wave resource characterization Oteiza/ Economical, social, legal and political aspects of ocean energy	Tony Lewis Jose L. Villate Jose L. Villate Jochem Weber Ikigo Ansola Ikigo Ansola Ikigo Ansola Ikigo Ansola ChabuBakr Bahaj Biruce Cameron C H Jo Luis Gato	Paper ID 350 357 395 439 445 619 45 310 403 386 413 386 413 436 Chai Chai Chai PFR PRM	Technical visits:	Marco Fontana Félix Elefant Maximilian Hengstmann Altor Vega-Valladares Aeron Roach Hannah Mankie Hannah Mankie Leonardo Gambarelli Natalia Sergienko Aiva Bechlenberg Urio tiquierdo Samantha Quinn Molly Grear Jonathan Colby Craig White
15:30 Presentation presentation 16:15 Closing ceremony 20:30 Social	Baroja/ Wave device development and testing Arriaga/ Wave resource characterization Oteiza/ Economical, social, legal and political aspects of ocean energy	Tony Lewis Jose L. Villate Jose L. Villate Jochem Weber Ikigo Ansola Ikigo Ansola Ikigo Ansola Ikigo Ansola ChabuBakr Bahaj Biruce Cameron C H Jo Luis Gato	Paper ID 350 357 395 439 445 619 45 310 403 386 413 386 413 436 Chai Chai Chai PFR PRM	Terrace and Chillida room) Tele Performance enhancement of thicking VECs is an exclusing water columes technology Numerical pressing store of the energy performance of a wave energy conventer comparing a Hybrid with wave system. The case of the Volum US-S is an exclusing water columes technology. Anamagin of the water system. The case of the Volum US-S is an exclusing water columes technology. Anamagin of the water system. The case of the Volum US-S is an exclusing water columes technology. Anamagin of the water is system. The case of the Volum US-S is an exclusing water presenter and the influence oner and comparing Wave Energy Conventer. Anamaging water is system. The case of the Volum US-S is an exclusion of or celefang Wave Energy Conventer. The base performance. De data is interpolation of colume energy accurace vanishies. A comparative simplifie the influence oner influence and the volum US-S is an exclusion. The base performance. De data is interpolation of colume energy accurace vanishies. A comparative energy Conventer. Tables of the impolation of base interpolation of a data wave parameter and the influence oner influence and the influence and the influence oner influence and the influence oner influence oner influence and the influence oner influence and the influence oner influence and the influence oner influence oner influence oner influence and the influence oner influence and the influence oner	Marco Fontana Félix Elefant Maximilian Hengstmann Altor Vega-Valladares Aeron Roach Hannah Mankie Hannah Mankie Leonardo Gambarelli Natalia Sergienko Aiva Bechlenberg Urio tiquierdo Samantha Quinn Molly Grear Jonathan Colby Craig White
15:30 Oral presentation 16:15 Closing ceremony	Baroja/ Wave device development and testing Arriaga/ Wave resource characterization Oteiza/ Economical, social, legal and political aspects of ocean energy	Tony Lewis Jose L. Villate Jose L. Villate Jochem Weber Ikigo Ansola Ikigo Ansola Ikigo Ansola Ikigo Ansola ChabuBakr Bahaj Biruce Cameron C H Jo Luis Gato	Paper ID 350 357 395 439 445 619 45 310 403 386 413 386 413 436 Chai Chai Chai PFR PRM	Terrace and Chillida room) Tele Performance enhancement of thicking VECs is an exclusing water columes technology Numerical pressing store of the energy performance of a wave energy conventer comparing a Hybrid with wave system. The case of the Volum US-S is an exclusing water columes technology. Anamagin of the water system. The case of the Volum US-S is an exclusing water columes technology. Anamagin of the water system. The case of the Volum US-S is an exclusing water columes technology. Anamagin of the water is system. The case of the Volum US-S is an exclusing water presenter and the influence oner and comparing Wave Energy Conventer. Anamaging water is system. The case of the Volum US-S is an exclusion of or celefang Wave Energy Conventer. The base performance. De data is interpolation of colume energy accurace vanishies. A comparative simplifie the influence oner influence and the volum US-S is an exclusion. The base performance. De data is interpolation of colume energy accurace vanishies. A comparative energy Conventer. Tables of the impolation of base interpolation of a data wave parameter and the influence oner influence and the influence and the influence oner influence and the influence oner influence oner influence and the influence oner influence and the influence oner influence and the influence oner influence oner influence oner influence and the influence oner influence and the influence oner	Marco Fontana Félix Elefant Maximilian Hengstmann Altor Vega-Valladares Aeron Roach Hannah Mankie Hannah Mankie Leonardo Gambarelli Natalia Sergienko Aiva Bechlenberg Urio tiquierdo Samantha Quinn Molly Grear Jonathan Colby Craig White