ECOSISTER Spoke 6 Scientific&technical progress workshops - September 29th, 2023

	Location	Seminar Room, 3rd floor, MO17 (Edificio Fisica), via Campi 213/A, Modena				Location	Sala riunioni MO26 1st floor, Via Vivarelli 10, Modena, Italy				Location	Auditorium Centro S. Elisabetta, Parco Area delle Scienze, 95, 43124 Parma PR			
	Link (WP1)	https://teams.microsoft.com/dl/launcher/launcher.html?url=%2F_%23%2Fl%2Fmeetup-join%				Link (WP2)	https://teams.microsoft.com/l/meetup-join/19%3apFExQHJjLHv7sFvf50DziuXfEOMYsbg0u54				Link (WP3)	https://teams.microsoft.com/l/meetup-join/19%3ameeting_MjlhNDRhNzMtNTAwOS00Y2I2LTkxZTQtYTgwOW			
	WP1					**WP2**					**WP3**				
Time	Area	Speaker	Authors	Affiliation	Title	Area	Speaker	Authors	Affiliation	Title	Area	Speaker	Authors	Affiliation	Title
9:30-9:35	Introduction	Alice Ruini	-	UNIMORE	HPC design of materials for clean energy applications	Introduction	Luca Selmi	-	UNIMORE	HPC-empowered design of innovative Devices, Components and Systems for Energy Efficient and Sustainable Engineering	Introduction	Renato Vacondio	-	UNIPR	Simulation for sustainable land, waters and their resources management
9:35-9:55	Pilot Applications	Davide Giavazzi	Francesco di Maiolo, Anna Painelli, Andrea Phan Huu, Cristina Sissa	UNIPR	Organic LED: modeling solid state solvation towards optimized performances	Turbulence	Roberto Corsini	Roberto Corsini, Andrea Cimarelli, Enrico Stalio	UNIMORE	High-fidelity simulation of a wing section in separated flow conditions	Floods	Susanna Dazzi	Susanna Dazzi, Renato Vacondio, Paolo Mignosa, Valeria Todaro, Omayma Amellah, Aaron English, Alessia Ferrari, Matteo Pianforini	UNIPR	Flood hazard mitigation using HPC innovative hydrodynamic models
9:55-10:15	Pilot Applications	Michele Salvador	Elena Degoli, Rita Magri, Rita Maji, Alice Ruini	UNIMORE	The role of self-healing polymers in the interfacial and structural properties of lithium-ion batteries: a molecular modeling study	Fluid dynamics	Luca Pagliarini	Fabio Bozzoli, Roberto Corsini, Enrico Stalio	UNIPR	RANS of a wing section in separated flow conditions	Floods	Stefano Orlandini	Stefano Orlandini, Giovanni Moretti	UNIMORE	Unstructured Segmentation of Complex Terrains for Accurate and Efficient Surface Flow Modeling
10:15-10:35	Pilot Applications	Daniele Fazzi	Artur Nenov, Fabrizia Negri, Robert Hertzhoff, Nora Gildemeister, Sven Geller, Klaus Meerholz; Francesco Segatta, Flavia Aleotti, Francesco Montorsi, Marco Garavelli, Daniel Aranda, Fabrizio Santoro, Shaul Mukamel	UNIBO	Modelling of electronic structure, dynamics and spectroscopical properties of organic functional materials for energy-saving applications	Turbulence	Marco Crialesi Esposito	Marco Crialesi Esposito, Andrea Cimarelli, Enrico Stalio	UNIMORE	Road towards the numerical simulation of wind waves	Argricolture	Vittorio Bernuzzi	Andrea Prati, Vittorio Bernuzzi, Leonardo Rossi, Claudio Ferrari e Massimo Bertozzi	UNIPR	Enhancing Precision Agriculture with Deep Learning Techniques
10:35-10:55	**BREAK**					**BREAK**					**BREAK**				
10:55-11:15	High-Throughput	Marco Bertani	Thibault Charpentier, Francesco Faglioni, Cristina Menziani Alfonso Pedone	UNIMORE	Exploiting machine learning techniques for the simulation of glass properties.	Photonics	Lorenzo Rosa	Lorenzo Rosa, Luca Vincetti	UNIMORE	Hollow-core fiber optics for energy-efficient communication and sensing	Methods	Francesco Casini (online)	Cecilia Vernia, Francesco Casini, Cristian Giardinà	UNIMORE	Stochastic reaction-diffusion models
11:15-11:35	High-Throughput	Marco Gibertini	F. Haddadi, L. Ponet, D. Campi, N. Marzari	UNIMORE	Expanding the portfolio of magnetic 2D materials by high-throughput simulations	Electronics	Lisa Tondelli	Lisa Tondelli, Ruben Asanovski, Luca Selmi	UNIMORE	Electrothermal analysis of large scale finFETs for power efficient RF electronics	Trophic Networks	Michele Bellingeri	Michele Bellingeri (UniPr) Davide Cassi (UniPr), David Bohan (INRAE, Digione, Francia), Daniele Bevacqua (INRAE, Avignone, Francia), Roberto Alfieri UNIPR	UNIPR	Resilience and biodiversity loss of agricultural food webs
11:35-11:55	Computational spectroscopy	Ifeanyi Onuorah	Pietro Bonfà, Roberto De Renzi	UNIPR	High-throughout methods for spectroscopic investigations of advanced materials for the ecological transition	Electronics	Tommaso Zanotti	Tommaso Zanotti, Francesco Maria Puglisi, Lorenzo Benatti, Simone Benatti, Paolo Pavan	UNIMORE	Innovative Circuits and Systems for Energy-efficient HPC And Edge Computing	Contamination migration	Alessandra Feo	Fulvio Celico, Alessandra Feo	UNIPR	Investigating the migration (and extraction) of immiscible contaminants fluid flow in homogeneous and heterogeneous aquifers with high-resolution shock-capturing numerical simulations
11:55-12:15	Computational spectroscopy	Luca Bursi	Alice Ruini, Simone Vacondio	UNIMORE	First principles simulation of UPS spectra and defects' thermodynamics in emerging materials for next-generation electronics and optics	Systems	Andrea Bartolini (online)	-	UNIBO	Modelling and controlling power in high performance computing processors		Fabrizio Laurini	Mirko Anello, Marco Bittelli, Massimiliano Bordoni, Fabrizio Laurini,	Unipr	Robust Statistical Processing of Long-Time Data Series to Estimate Soil Water Content
	Joint Session					**Joint Session**					**Joint Session**				
	Link (All WPs):	https://teams.microsoft.com/l/message/19:EMuo3223LTH3NZGXPegavtrPkUW69R7nyVCAel08OXQ1@thread.tacv2/1695152184363?tenantId=e787b025-3fc6-4802-874a-9c988768f892&groupId=d3807fbf-2f1e-407f-80a2-ad42fb3464c1&parentMessageId=1695152184363&teamName=ECOSISTER%20SPOKE%206%20JO													
12:15-12:30	HPC Support	Fabio Affinito	Fabio Affinito, Massimiliano Guarrasi	CINECA	La roadmap di CINECA e le prossime sfide tecnologiche	HPC Support	Fabio Affinito	Fabio Affinito, Massimiliano Guarrasi	CINECA	La roadmap di CINECA e le prossime sfide tecnologiche	HPC Support	Fabio Affinito	Fabio Affinito, Massimiliano Guarrasi	CINECA	La roadmap di CINECA e le prossime sfide tecnologiche
12:30-12:45 *	HPC Support	Carmelo Pellegrino	Carmelo Pellegrino, Claudio Grandi	INFN	Resource access policy in ICSC e prospettive di sviluppo dell'infrastruttura INFN	HPC Support	Carmelo Pellegrino	Carmelo Pellegrino, Claudio Grandi	INFN	Resource access policy in ICSC e prospettive di sviluppo dell'infrastruttura INFN	HPC Support	Carmelo Pellegrino	Carmelo Pellegrino, Claudio Grandi	INFN	Resource access policy in ICSC e prospettive di sviluppo dell'infrastruttura INFN
12:45-13:15 *	Training	All	All	All	Future training activities in SP6	Training	All	All	All	Future training activities in SP6	Training	All	All	All	Future training activities in SP6
13:15	END OF WORKSHOP(S)					END OF WORKSHOP(S)					END OF WORKSHOP(S)				
	DISSEMINATION OF THE ECOSISTER SPOKE 6 ACTIVITIES WILL BE PRESENTED TO THE GENERAL PUBLIC DURING THE "RESEARCHERS NIGHT" EVENTS AT THE UNIPR AND UNIMORE PREMISES. PLEASE CONSULT THE OFFICIAL UNIVERSITY WEBSITES FOR DETAILS														

* means broadcast via remote connection

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