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1:55 p.m. CEST 7:55 a.m. EDT 4:55 a.m. PDT 8:55 p.m. JST	<p>MAIN ROOM Alfio QUARTERONI Welcome and Introduction to the Conference</p>		
2:00 p.m. CEST 8:00 a.m. EDT 5:00 a.m. PDT 9:00 p.m. JST	<p>PLENARY SESSION - MAIN ROOM, Chairman: Paolo Zunino Natalia TRAYANOVA Johns Hopkins University, MD (USA) "Personalized Simulations + AI: Could it be a Recipe for Success?"</p>		
2:40 p.m. CEST 8:40 a.m. EDT 5:40 a.m. PDT 9:40 p.m. JST	<p>PLENARY SESSION - MAIN ROOM, Chairman: Paolo Zunino  Luca DEDE' Politecnico di Milano (IT) "Numerical simulation of cardiac electromechanics: towards multiscale and multiphysics modeling of the whole heart"</p>		
	ROOM 1, Chairman: Stefano PAGANI	ROOM 2, Chairman: Marco FEDELE	ROOM 3, Chairman: Andrea MANZONI
3:20 p.m. CEST 9:20 a.m. EDT 6:20 a.m. PDT 10:20 p.m. JST	 Ludovica CESTARIOLO - Politecnico di Milano (IT) "Electrophysiology of the Zebrafish Heart: A Computational Model"	 Federica CAFORIO - University of Graz (AT) "Studying the effects of pulse wave propagation on cardiac function with a 3D model of cardiac electromechanics coupled to a 1D model of the cardiovascular system"	 Pasquale AFRICA - Politecnico di Milano (IT) "Introducing lifex, a New High-Performance Library for Integrated Heart Simulations"
3:40 p.m. CEST 9:40 a.m. EDT 6:40 a.m. PDT 10:40 p.m. JST	  A coffee with Luca DEDE'	 A coffee with Natalia TRAYANOVA	
4:10 p.m. CEST 10:10 a.m. EDT 7:10 a.m. PDT 11:10 p.m. JST	 Noah DETAL - Georgia Institute of Technology (USA) "Terminating Spiral Waves with a Single Designed Stimulus: Teleportation as the Mechanism for Defibrillation"	 Matteo SALVADOR - Politecnico di Milano (IT) "Electromechanical modeling of human ventricles with ischemic cardiomyopathy: numerical simulations in sinus rhythm and under arrhythmia"	 Traian ILIESCU - Virginia Tech (USA) "Data-Driven Variational Multiscale/Reduced Order Models"
4:30 p.m. CEST 10:30 a.m. EDT 7:30 a.m. PDT 11:30 p.m. JST	 Hans DIERCKX – KULeuven (BE) "Mathematical description of linear-core rotors in terms of phase defect lines"	 Roberto PIERSANTI - Politecnico di Milano (IT) "3D-0D closed-loop numerical modeling of cardiac biventricular electromechanics"	 Ludovica CICCÌ - Politecnico di Milano (IT) "A deep learning-based operator approximation for model order reduction in cardiac mechanics"
4:50 p.m. CEST 10:50 a.m. EDT 7:50 a.m. PDT 11:50 p.m. JST	 Thomas GRANDITS - TU Graz & BioTechMed-Graz (AT) "GEASI: Geodesic-based Earliest Activation Sites Identification in cardiac models" fibrillation"	 Simone STELLA - Politecnico di Milano (IT) "A fast cardiac electro-mechanics model with blood circulation using the Eikonal equation"	 Riccardo TENDERINI - EPFL (CH) "PDE-aware Deep Learning for Inverse Problems in Cardiac Electrophysiology"
5:10 p.m. CEST 11:10 a.m. EDT 8:10 a.m. PDT 00:10 a.m. JST	<p>PLENARY SESSION - MAIN ROOM, Chairman: Andrea Manzoni  Julius M. GUCCIONE UCSF (USA) "Precision Medicine in Human Heart Modeling"</p>		
5:50 p.m. CEST 11:50 a.m. EDT 8:50 a.m. PDT 00:50 a.m. JST	  A coffee with Julius M. Guccione		

July 2 – Friday			
10.00 a.m. CEST 4.00 a.m. EDT 1.00 a.m. PDT 5.00 p.m. JST	<p>MAIN ROOM</p> <p> Pasquale AFRICA^{ORCID} Politecnico di Milano (IT) LifeX “hands on” session</p>		
2:00 p.m. CEST 8:00 a.m. EDT 5:00 a.m. PDT 9:00 p.m. JST	<p>PLENARY SESSION - MAIN ROOM, Chairman: Christian VERGARA</p> <p> Kenji TAKIZAWA Waseda University, Tokyo (JP) “Space–Time Flow Computation with Contact Between the Heart Valve Leaflets”</p>		
2:40 p.m. CEST 8:40 a.m. EDT 5:40 a.m. PDT 9:40 p.m. JST	<p>PLENARY SESSION - MAIN ROOM, Chairman: Christian VERGARA</p> <p> Boyce GRIFFITH^{ORCID} University of North Carolina at Chapel Hill (USA) “Cardiac Fluid–Structure Interaction”</p>		
	ROOM 1, Chairman: Pasquale AFRICA	ROOM 2, Chairman: Christian VERGARA	ROOM 3, Chairman: Paolo ZUNINO
3:20 p.m. CEST 9:20 a.m. EDT 6:20 a.m. PDT 10:20 p.m. JST	<p>Claudia NAGEL - Karlsruhe Institute of Technology (DE) “Comparison of source models and forward calculation methods for atrial electrophysiology regarding activation times and electrocardiograms”</p>	<p> Ivan FUMAGALLI - Politecnico di Milano (IT) “A reduced 3D-0D FSI model of the aortic valve considering bending forces”</p>	<p> Stefano PAGANI - Politecnico di Milano (IT) “A computational study of the electrophysiological substrate triggering arrhythmias”</p>
3:40 p.m. CEST 9:40 a.m. EDT 6:40 a.m. PDT 10:40 p.m. JST	<p> A coffee with Boyce GRIFFITH</p>	<p> A coffee with  Kenji TAKIZAWA</p>	
4:10 p.m. CEST 10:10 a.m. EDT 7:10 a.m. PDT 11:10 p.m. JST	<p> Lia GANDER - USI (CH) “Fast characterization of inducible regions of atrial fibrillation models with multi-fidelity Gaussian process”</p>	<p> Nicolàs BARNAFI - Università degli Studi di Milano (IT) “Scalable domain decomposition preconditioners for cardiac mechanic”</p>	<p> Stefania FRESCA - Politecnico di Milano (IT) “Deep learning-based reduced order models for the real-time approximation of nonlinear time-dependent parametrized PDEs”</p>
4:30 p.m. CEST 10:30 a.m. EDT 7:30 a.m. PDT 11:30 p.m. JST	<p> Ngoc Mai Monica HUYNH - Università degli Studi di Pavia (IT) “BDDC and FETI-DP preconditioners for Newton–Krylov solvers for the cardiac Bidomain model”</p>	<p> Daniele CORTI - INRIA & Sorbonne Université & CNRS (FR) “A 3D Nitsche–XFEM method for immersed FSI with thin-walled solids”</p>	<p> Francesco REGAZZONI - Politecnico di Milano (IT) “An oscillation-free segregated algorithm for the numerical simulation of cardiac active mechanics”</p>
4:50 p.m. CEST 10:50 a.m. EDT 7:50 a.m. PDT 11:50 p.m. JST	<p> Ali GHARAVIRI - USI (CH) “Pulmonary vein isolation increases efficacy of antiarrhythmic drugs in a 3D computer model for atrial”</p>	<p> Giulia LURAGHI - Politecnico di Milano (IT) “Insights into FSI models of the thoracic endovascular aortic repair procedure”</p>	<p> Elena ZAPPON - Politecnico di Milano (IT) “Efficient solution of coupled problems through DEIM-based data projection across non-conforming interfaces”</p>
5:10 p.m. CEST 11:10 a.m. EDT 8:10 a.m. PDT 00:10 a.m. JST	<p> Francisco SAHLI COSTABAL - Pontificia Universidad Católica de Chile (CL) “Learning atrial fiber orientations from intracardiac maps using physics-informed neural networks”</p>	<p> Elias KARABELAS - University of Graz (AT) “Incorporating Heart Valves Using a Varying Permeability Approach”</p>	
5:30 p.m. CEST 11:30 a.m. EDT 8:30 a.m. PDT 00:30 a.m. JST	<p> Sebastian DOMINGUEZ - University of Saskatchewan (CA) “Tuning parameters across the monodomain, bidomain, and EMI models in cardiac electrophysiology”</p>	<p> Reidmen AROSTICA - University of Groningen (NL) “A physiological benchmark for cardiac mechanics”</p>	

July 3 - Saturday			
2:00 p.m. CEST 8:00 a.m. EDT 5:00 a.m. PDT 9:00 p.m. JST	PLENARY SESSION - MAIN ROOM, Chairman: Antonio F. CORNO  Gianluca PONTONE Centro Cardiologico Monzino, Milan (IT) <i>"Cardiac imaging: what are the clinical needs and what are the gaps to be filled"</i>		
2:40 p.m. CEST 8:40 a.m. EDT 5:40 a.m. PDT 9:40 p.m. JST	PLENARY SESSION - MAIN ROOM, Chairman: Antonio F. CORNO Antonio FRONTERA Ospedale San Raffaele, Milan (IT) <i>"Analysis of functional and structural abnormalities in arrhythmias based on high-density electro-anatomical maps"</i>		
	ROOM 1, Chairman: Luca DEDE'	ROOM 2, Chairman: Francesco REGAZZONI	ROOM 3, Chairman: Ivan FUMAGALLI
3:20 p.m. CEST 9:20 a.m. EDT 6:20 a.m. PDT 10:20 p.m. JST	 Antonio F. CORNO - University of Texas Health (USA) <i>"Fibonacci in the universe, nature and heart"</i>	 Amadeus GEBAUER - Technische Universität München (DE) <i>"Homogenized Constrained Mixture Model for Predicting Cardiac Growth and Remodeling"</i>	 Jochen BRENNEISEN - Karlsruhe Institute of Technology (DE) <i>"A sequential coupling approach for fluid-structure interaction in a patient specific whole heart geometry"</i>
3:40 p.m. CEST 9:40 a.m. EDT 6:40 a.m. PDT 10:40 p.m. JST	 <i>A coffee with</i> Antonio FRONTERA	  <i>A coffee with</i> Gianluca PONTONE	  <i>A coffee with</i> Alessandro VENEZIANI
4:10 p.m. CEST 10:10 a.m. EDT 7:10 a.m. PDT 11:10 p.m. JST	 Chitaranja MAHAPATRA - UCSF (USA) <i>"In Silico Investigation of SARS-CoV-2 Inhibitor Hydroxychloroquine towards Sinoatrial Arrhythmogenesis"</i>	 Marco FEDELE - Politecnico di Milano (IT) <i>"A novel pipeline from cardiac cine-MRI to patient-specific image-based hemodynamics simulations"</i>	 Yuri VASSILEVSKI - Russian Academy of Science & Sechenov University Moscow (RU) <i>"Stable numerical schemes for modelling hemodynamic flows in time-dependent domains"</i>
4:30 p.m. CEST 10:30 a.m. EDT 7:30 a.m. PDT 11:30 p.m. JST	 Michael MOULTON - University of Nebraska (USA) <i>"Identification of circulatory system properties from parameters in heart failure with a preserved ejection fraction (HFpEF) patients using a mathematical model and parameter estimation"</i>	Stefano BUOSO - ETH Zurich (CH) <i>"Image-based modelling of left ventricular function using physics informed neural networks"</i>	 Alberto ZINGARO - Politecnico di Milano (IT) <i>"Accurate multiscale numerical simulation of blood flow in the human heart"</i>
4:50 p.m. CEST 10:50 a.m. EDT 7:50 a.m. PDT 11:50 p.m. JST	 Joyce REIMER - University of Saskatchewan (CA) <i>"Numerical Simulation of Long QT Syndrome Symptoms, Triggers, and Treatments"</i>	 Hossein SHARIFI - University of Kentucky (USA) <i>"Multiscale Modeling of LV Growth under Autonomic Regulation of Baroreflex Feedback Loop"</i>	 Michele BUCELLI - Politecnico di Milano (IT) <i>"A staggered scheme for the numerical simulation of the heart: towards full coupling of 3D electrophysiology, mechanics and fluid dynamics"</i>
5:10 p.m. CEST 11:10 a.m. EDT 8:10 a.m. PDT 00:10 a.m. JST	PLENARY SESSION - MAIN ROOM, Chairman: Luca DEDE'  Alessandro VENEZIANI Emory University, Atlanta (GA) USA <i>"Cardiovascular Mathematics in the Era of Data: Developing and Reducing Models for the Clinics"</i>		
5:50 p.m. CEST 11:50 a.m. EDT 8:50 a.m. PDT 00:50 a.m. JST	Closing remarks		