

SOFA Symposium Program

Day: 23rd November 2021

Location: Online

NB: the program schedule is following the Central European Time (CET)

	9:00 am Online welcoming		
	9:15 am	m Introduction: Welcome to the SOFA Symposium	
Soft robotics	9:30 am	Modeling and control of self-healing soft robots with SOFA	Ferrentino, Pasquale
	9:45 am	Modeling of soft jointed miniaturized robot for high speed micromanipulation	Leveziel, Maxence
	10:00 am	Parallel Continuum Robots Modeling Using SOFA's Soft Robot	Mauzé, Benjamin
	10:15 am	Evolving Soft Robots with Realistic Fluidic Actuators using CPPN-NEAT in SOFA	Pienaar, Michael
	10:30 am	Break - meet the speakers online	
Numerical methods for simulation	10:50 am	Implementation of a new linear solver using left-looking Cholesky decomposition	Pinçon, Philippe
	11:05 am	FeniCSX: approach for automatic differentiation for hyperelastic simulations	Mazier, Arnaud
	11:20 am	Isolating mechanical DOFs: fast computation of compliance matrix in contact simulations	Zeng, Ziqiu
	11:35 am	An Adjoint Method for Surface Matching with SofaPython3	Mestdagh, Guillaume
	11:50 am	Break - meet the speakers online	
	12:10 pm	Lunch & Online networking	

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	1:10 pm	SOFA international community & presentation of the SOFA Awards		
Medical robotics	1:30 pm	Model-based Sensing for the Implementation of a Smart Prostate Phantom	Escaida N., Stefan	
	1:45 pm	Human machine interface for robot-assisted intraluminal procedures	Finocchiaro, Martina	
	2:00 pm	A framework for autonomous surgery: the role of simulation	Tagliabue, Eleonora	
	2:15 pm	Plastic Cosserat beam model and applications	Krewcun, Camille	
	2:30 pm	Break - meet the speakers online		
Medical simulation: haptics & VR	2:50 pm	InfinyTech3D: haptics and cutting, new SOFA plugins release	Pernod, Erik	
	3:05 pm	A visuo-haptic simulator for surgical training	Saporetti, Chiara	
	3:20 pm	A 4-dof input device (for interactive training with SOFA) that you already own	Peters, Jorg	
	3:35 pm	Microsurgery Simulator of a Cerebral Aneurysm Clipping with interactive deformation in a Mixed Reality environment	Civilla, Lorenzo	
	3:50 pm	Break - meet the speakers online		
Medical simulation: training & planning	4:10 pm	A Novel VR Platform for Outpatient Hysteroscopy Training	Poliakov, Vladimir	
	4:25 pm	A Tumor Growth Simulation and an Open Source Viewing Tool for the SOFA Framework	Somers, Peter	
	4:40 pm	A Hybrid Method For Fast Realistic Soft Tissue Modeling	Bounik, Zahra	
	4:55 pm	Break - meet the speakers online		
	5:15 pm	Award Ceremony 2021		
	5:30 pm	Futures developments in SOFA: introduction of the STC#12		
	5:45 pm	Closing of the Symposium		
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