



Day 01

6 July 2026

08:00 - 09:00	Registration	REGISTRATION
09:00 - 09:20	Opening	OPENING
09:20 - 10:20	Computing through the Lens of Geometry Mathieu Desbrun	Chair: Jorg Peters KEYNOTE
10:20 - 11:00	Coffee Break	COFFEE BREAK
11:00 - 12:00	Session 1 Design and Manufacturing	Chair: Tsz Ho Kwok SPM
	11:00 - 11:20	Part orientation fused shape optimization for minimisation of print time and material waste in extrusion-based 3D printing (CAD) Don Pubudu Vishwana Joseph Jayakody, Bailin Deng, Ravindra S. Goonetilleke, Lauren E.J. Thomas-Seale and Hyunyoung Kim
	11:20 - 11:40	Lifetime-based generative design of 3D-printed bearings Lucas Vergez and Tsz Ho Kwok
	11:40 - 12:00	Visual Permeability-Driven Generation of Support-Free Stochastic Porous Structures Xiaokang Liu, Kaifeng Tian, Lingxin Cao, Longdu Liu, Lihao Tian, Bingteng Sun, Changhe Tu, Lin Lu and Baoquan Chen
12:00 - 13:30	Lunch	LUNCH
13:30 - 14:50	Session 2 Discrete Shape Modelling & Analysis	Chair: Michela Mortara SMI
	13:30 - 13:50	A finite element method based discretization of the Hamiltonian operator on triangular meshes Subhendu Mohanty, Aditya Tatu and Nabin Kumar Sahu
	13:50 - 14:10	EASE: Parametric Garment Design with Explicit and Local Ease Control Kristijan Bartol, Frieda Hentschel, Nataliya Sadretdinova, Benjamin Russig, Melinos Averkiou, Yordan Kyosev and Stefan Gumhol
	14:10 - 14:30	Delaunay triangulation based sampling approach for the Voronoi diagram of spheres Sasinas Alias Haritha Z A, Manoj Kumar M, Amrisha Srivastava, Pradyumnan Raghuv eeran, Yegneswaran R V and Ramanathan Muthuganapathy
	14:30 - 14:50	An active surface reconstruction method based on growing neural gas (CAG) Qingqing Wang, Renzhong Feng
14:50 - 15:30	Coffee Break	COFFEE BREAK
15:30 - 16:50	Session 3 Mesh Processing	Chair: Zichun Zhong SPM
	15:30 - 15:50	Local DeWall: Billion-Scale 3D Delaunay Triangulation on a Single GPU Wuheng Gao and Renjie Chen
	15:50 - 16:10	Weakly supervised learning for 3D mesh segmentation via pixel-level labeling Wen Wu, Weiyin Ma, Xian-Tao Wu and Xiao-Diao Chen
	16:10 - 16:30	Accelerating Hausdorff Distance Computation between Triangle Meshes via Spatial Locality Wenbo Yang, Aizeng Wang, Fei Hou and Tao Ning
	16:30 - 16:50	Knit2Vector: 3D Knitted Texture Reconstruction from Unconstrained Images via Differentiable Vectorization Yu Zhou, Lingxin Cao, Junqiu Zhu and Lin Lu
16:50 - 17:05	Coffee Break	COFFEE BREAK
17:05 - 18:05	Session CAD SI AI for Design and Manufacturing	Chair: Ramanathan Muthuganapathy CAD SI
	17:05 - 17:25	From Dialogue to Design: GenAI-Based Automation of Parametric Modeling and Sizing Tasks in CAD Workflows Tobias Rosnitschek, Jan Walschewski, Peter Grohmann, Sascha Eckardt, Malte Stonis, Bettina Alber-Laukant, Stephan Tremmel
	17:25 - 17:45	Topology Enhanced DeepSDF with Applications Weiliang Dong and Hongwei Lin
	17:45 - 18:05	A data-driven anisotropic refinement strategy for LR B-spline surface approximation of 3D scattered point clouds Alberto Biliotti, Carlotta Giannelli, Cesare Bracco and Krunal Raval



09:00 - 10:00	Design in the Age of AI and Spatial Computing Bernd Bickel	Chair: Charlie C.L. Wang	KEYNOTE
10:00 - 10:40	Coffee Break		COFFEE BREAK
10:40 - 12:00	Session 4 Volumes	Chair: Mathieu Desbrun	SMI
	10:40 - 11:00	GravoTet: A Fast Multigrid Hierarchy Construction for Tetrahedral Meshes Marcel Padilla, Ruben Wiersma, Tim Huisman, Jackson Compolattaro, Olga Sorkine-Hornung and Klaus Hildebrandt	
	11:00 - 11:20	Direct Volume Rendering of Tree-based Tetrahedral Adaptive Mesh Refinement Data (CAG) Musa Ege Ünalán, Serkan Demirci, Stefan Zellmann, Uğur Güdükbay	
	11:20 - 11:40	VOX2Surf: Faithful Surface Extraction from Coarse Binary Voxels Hari Hara Gowtham Jetti, Leiheng Qin, Chi Huynh, Joe Khawand, Anandhu Sureshkumar, Nicholas Vining, Marie-Paule Cani, Amal Dev Parakkat and Alla Sheffer	
	11:40 - 12:00	An algebraic framework for precise and robust swept-volume computation Jinesh Machchhar	
12:00 - 13:30	Lunch		LUNCH
13:30 - 14:50	Session 5 CAD and Geometric Modeling	Chair: Charlie C.L. Wang	SPM
	13:30 - 13:50	 CAD model reconstruction of spherical-jointed lattice structures from point clouds with discrete planar convex hulls (CAD) Online Bohan Zhang, Xiao Xiao, Mulin Yu, Chunjiang Wang, Zhiyuan Tang and Xiangdong Sun	
	13:50 - 14:10	A structured analysis of CAD assembly model interfaces for their enhanced computerized processing (CAD) Jean-Claude Léon, Flavien Boussuge, Franca Giannini, Marina Monti, Katia Lupinetti, Brigida Bonino, Jean-Philippe Pernot and Roberto Raffaeli	
	14:10 - 14:30	Self-intersection detection algorithm of sweep surfaces based on geometric features of spine curves (CAD) Chuan He, Aizeng Wang and Gang Zhao	
	14:30 - 14:50	Fast bi-3 Quadratic-Attraction Subdivision Kestutis Karciauskas and Jorg Peters	
14:50 - 15:30	Coffee Break		COFFEE BREAK
15:30 - 16:50	Session 6 Parametric Surfaces & Computational Design	Chair: Stefanie Hahmann	SMI
	15:30 - 15:50	BladePHT: Globally Consistent Modeling of Blade Surfaces using PHT-splines Bin Li and Zhouwang Yang	
	15:50 - 16:10	Approximating Doo-Sabin limit surfaces using geometrically continuous Bézier patches Dimitrios Tolis, Michelangelo Marsala, Angelos Mantzaflaris and Bernard Mourrain	
	16:10 - 16:30	Primal-Dual Polycatenanes: Modular Design and Construction of Catenated 3D Graphs Using Primal and Dual of Labeled 3-Honeycombs Tolga Yildiz, Vinayak Krishnamurthy and Ergun Akleman	
	16:30 - 16:50	Geometry-Aware Upcycling of Architectural Tessellations Sultan Aljabri, Hassan Baharami, Raphael Falque and Nico Pietroni	
16:50 - 17:05	Coffee Break		COFFEE BREAK
17:05 - 18:00	SPM/SMI Award Ceremony		SPM/SMI
18:10	Meeting at the entrance		SOCIAL
18:30 - 22:30	Banquet at Ferryboat + Bosphorus Tour		SOCIAL



09:00 - 10:00	Constructing and reconstructing surface geometries Tamas Varady	Chair: Michael Barton	KEYNOTE
10:00 - 10:40	Coffee Break		COFFEE BREAK
10:40 - 12:00	Session 7 Point Clouds, Registration, and Reconstruction	Chair: Congyi Zhang	SPM
	10:40 - 11:00	 Sinkhorn-CPD: Robust Point Cloud Registration via Unbalanced Entropic Optimal Transport Online Jin Zhang, Mingyang Zhao, Bing Liu and Xin Jiang	
	11:00 - 11:20	PointInDI: Inversion by Direct Iteration for high-fidelity point cloud denoising Zheng Liu, Zhenyu Huang, Chuchen Guo, Maodong Pan and Ying He	
	11:20 - 11:40	PoseFusion: Fusing neural implicit surfaces for multi-view reconstruction from multi-pose captures Guanli Hou, Yuanmu Xu, Tenglong Ren, Jiangbei Hu, Fei Hou, Peng Song and Ying He	
	11:40 - 12:00	GSurf: Learning Signed Distance Fields from Splatting Opaque Gaussians for High-quality 3D Reconstruction Baixin Xu, Jiangbei Hu, Jiaze Li and Ying He	
12:00 - 13:30	Lunch		LUNCH
13:30 - 14:50	Session 8 Neural & Implicit Representations and Skeletons	Chair: Brian Wyvill	SMI
	13:30 - 13:50	BBSDF: Beyond the boundary generalizable neural SDF for unoriented planar pointsets and its application to medial axis extraction Bincy Antony and Ramanathan Muthuganapathy	
	13:50 - 14:10	Far-From-Boundary Fields for Learning Segmented Implicit Solids Yuhang Huang and Takashi Kanai	
	14:10 - 14:30	Extreme Continuous Level of Details for Skeleton-Based Implicit Surfaces Pierre Hubert-Brierre, Marie-Paule Cani and Eric Galin	
	14:30 - 14:50	DistillSkel: Learning pruned skeletons of 2D shapes through progressive knowledge distillation Bincy Antony, Anshuman Mishra, Pranav Raghuram, Dharunpathi Tamilselvan and Ramanathan Muthuganapathy	
14:50 - 15:30	Coffee Break		COFFEE BREAK
15:30 - 16:30	Session 9 Simulation and Analysis	Chair: Guoxin Fang	SPM
	15:30 - 15:50	Implicit neural field-based process planning for multi-axis manufacturing: direct control over collision avoidance and toolpath geometry (CAD) Neelotpal Dutta, Tianyu Zhang, Tao Liu, Yongxue Chen and Charlie C.L. Wang	
	15:50 - 16:10	Simultaneous rh-adaptive IsoGeometric Analysis using Optimal Transport and THB-Splines for gradient-dominated problems Mustapha Bahari and Angelos Mantzaflaris	
	16:10 - 16:30	Extended r-adaptive isogeometric analysis for weak-discontinuous problems Jingyi Cao, Ye Ji, Matthias Möller and Chungang Zhu	
16:30 - 16:45	Coffee Break		COFFEE BREAK
16:45 - ~	SPM and SMI Business Meeting (Closed Meeting)		SPM/SMI



09:00 - 10:00	Implicit Modeling - From Dreams to Industry and Back to Dreams Brian Wyvill (Recipient of the 2025 Tosiyasu L. Kunii Award)	Chair: Ergun Akleman	KEYNOTE
10:00 - 10:40	Coffee Break		COFFEE BREAK
10:40 - 12:00	Session 10 Animation, Interaction & Dynamic Scene Modelling	Chair: Ergun Akleman	SMI
	10:40 - 11:00 Data-driven Inverse Kinematics using Laban Movement Analysis Mehmet Akif Şahin, Sinan Sonlu and Uğur Güdükbay		
	11:00 - 11:20 When and Where to Touch: A Temporal Contact Priors for Text-Driven 3D Hand–Object Interaction Kossi Josué Adossehoun and Hazem Wannous		
	11:20 - 11:40 VegMRFP: Mixed Radiance Field Primitives for 3D Vegetation Reconstruction Ning Liu, Liyuan Liu, Haoran Xie and Shaojun Hu		
	11:40 - 12:00 PSF-4D: A Progressive Sampling Framework for View-Consistent 4D Editing Hasan Iqbal, Nazmul Karim, Azib Farooq, Umar Khalid, Zichun Zhong, Chen Chen and Jing Hua		
12:00 - 13:30	Lunch		LUNCH
13:30 - 14:40	Session 11 Lightning talks (Fast-Track Papers)	Chair: Guoxin Fang	SPM
	13:30 - 13:40 Topology-preserving polyhedral design using ribbon-based multi-sided patches Péter Salvi, Jázmin Szörfi, Márton Vaitkus and Tamás Várady		
	13:40 - 13:50 Stress-Driven and User-Guided Pythagorean-Hodograph Print-Paths for Additive Manufacturing Erkan Gunpinar, Serhat Cam and Kenji Shimada		
	13:50 - 14:00 An efficient T-spline surface skinning method via the inverse Bézier extraction Chuanzhao Li, Wei Wang, Sheng Lei, Gang Zhao and Xiaoxiao Du		
	14:00 - 14:10 Boundaries and Creases for Spline Surfaces with Extraordinary Vertices Param Gupta, Kestutis Karciauskas and Jorg Peters		
	14:10 - 14:20 Holder–Minkowski Implicits: Associative and Truly Generalized Averaging Operators for Expanding the Design Space of Implicitly Represented Shapes Tolga Yildiz, Vinayak Krishnamurthy and Ergun Akleman		
	14:20 - 14:30 Efficient and Accurate Bernstein Polynomial Composition via Monomial-Basis Transformation Tong Shen, Shiqing Xin and Jieqing Feng		
	14:30 - 14:40 KDH-CAD: Knowledge–data hybrid CAD learning under data scarcity Online Ziqing Gao, Zhijie Yang, Yaonaiming Zhao and Qiang Zou		
14:40 - 15:20	Coffee Break		COFFEE BREAK
15:20 - 16:00	 Symmetry, Steadiness, and other Revelations Online Jarek Rossignac (Recipient of the 2026 Tosiyasu L. Kunii Award)	Chair: Georges-Pierre Bonneau	INVITED TALK
16:00 - 16:15	 Shape Modeling for Engineering Design and Manufacturing Online Qiang Zou (Recipient of the 2026 SMI Young Investigator Award)	Chair: Zichun Zhong	INVITED TALK
16:15 - 16:30	Toward Compact and Structured Representations of Detailed 3D Shapes Congyi Zhang (Recipient of the 2026 SMI Young Investigator Award)	Chair: Zichun Zhong	INVITED TALK
16:30 - 16:50	Coffee Break		COFFEE BREAK
16:50 - 17:05	Shaping natural landscapes through simulation Guillaume Cordonnier (Recipient of the 2025 SMI Young Investigator Award)	Chair: Zichun Zhong	INVITED TALK
17:05 - 17:20	Scribbles to Structures: The Geometry of Creative Intent Amal Dev Parakkat (Recipient of the 2025 SMI Young Investigator Award)	Chair: Zichun Zhong	INVITED TALK
17:20 - 17:40	In Memory of Malcolm Sabin: A Celebration of His Life and Legacy	Chair: Brian Wyvill	COMMEMORATION
17:40 - 18:10	SPM/SMI Best Paper Awards + Closing		SPM/SMI