



# ICCP 2024

## EPFL - Lausanne

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Swiss National  
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International Conference on Computational Photography  
July 22 - 24, 2024

# PROGRAM GUIDE

Auditorium SG 1 (SG 1138)  
EPFL, Lausanne, Switzerland

## Monday, July 22nd

8.00 am – 9.00 am	☕ Welcome coffee and Registrations	SG1
9.00 am – 9.30 am	Opening Remarks: <b>Sabine Süsstrunk</b>	
9.30 am – 10.30 am	<b>Keynote A: Davide Scaramuzza: Event Cameras, a New Way of Sensing</b>	
10.30 am – 11.00 am	☕ Coffee break	SG0
11.00 am – 11.30 am	Invited talk: <b>Amir Zamir: Multimodal Foundation Models</b>	SG1
11.30 am – 12.30 pm <b>Oral session A</b> (11-min talks + 4-min Q&A)	<i>NeMF: Neural Microphysics Fields</i>	
	<i>ThermalNeRF: Thermal Radiance Fields</i>	
	<i>DRAGON: Drone and Ground Gaussian Splatting for 3D Building Reconstruction</i>	
	<i>Z-Splat: Z-Axis Gaussian Splatting for Camera-Sonar Fusion</i>	
12.30 pm – 2.00 pm	🍽️ Lunch and Affinity Group Meetings	SG0
2.00 pm – 2.30 pm	Invited talk: <b>Luat T Vuong: Nature-inspired Full-Stokes Polarimetric Camera</b>	SG1
2.30 pm – 3.15 pm <b>Oral session B</b> (11-min talks + 4-min Q&A)	<i>Learned B-Spline Parametrization of Lattice Focal Coding for Monocular RGBD Imaging</i>	
	<i>Task Driven Sensor Layouts - Joint Optimization of Pixel Layout and Network Parameters</i>	
	<i>Stereo-Knowledge Distillation from dpMV to Dual Pixels for Light Field Video Reconstruction</i>	
3.15 pm – 3.45 pm	Invited talk: <b>Emma Alexander: Reverse-Engineering Evolved Cameras</b>	
3.45 pm - 3.55 pm	Poster spotlight session A	
4.00 pm – 4.30 pm	☕ Coffee break	SG0
4.30 pm – 6.00 pm	Posters & Demos A	SG0+SG2
5.30 pm – 6.30 pm	Outreach	
6.30 pm – 8.00 pm	👥🍷 Community drink	SG0

## Tuesday, July 23rd

9.00 am – 10.00 am	<b>Keynote B: Jannick Rolland: Augmented and Virtual Reality: Shaping Tomorrow's World</b>	SG1
10.00 am – 10.30 am	☕ Coffee break	SG0
10.30 am – 11.00 am	Invited talk: <b>Fei Xia: AI-Enhanced Volumetric Optical Microscopy for Faster Imaging in Living Tissues</b>	SG1
11.00 am – 12.00 pm <b>Oral session C</b> (11-min talks + 4-min Q&A)	<i>HOLI-1-to-3: Transient-Enhanced Holistic Image-to-3D Generation</i>	
	<i>Handheld Mapping of Specular Surfaces using Consumer-Grade Flash LiDAR</i>	
	<i>Textureless Deformable Object Tracking with Invisible Markers</i>	
	<i>Deep Phase Coded Image Prior</i>	

12.00 pm – 12.30 pm	Invited talk: <b>Jiamin Wu: Computational light-field imaging for mesoscale intravital microscopy</b>	SG1
12.30 pm – 2.00 pm	🍽️ Lunch and Industry Consortium Lunch	SG0
2.00 pm – 2.30 pm	Invited Talk: <b>Alexandre Alahi: 7 Foundational Principles to Learn Representations</b>	SG1
2.30 pm – 3.30 pm <b>Oral session D</b> (11-min talks + 4-min Q&A)	<i>Test-time Training for Hyperspectral Image Super-resolution</i>	
	<i>Scanning Iridescent Reflectance</i>	
	<i>Efficient Time Sampling Strategy for Transient Absorption Spectroscopy</i>	
	<i>End-to-end Fluorescence Lifetime Imaging with optimized encoding and exposure allocation</i>	
3.30 pm – 3.40 pm	Poster spotlight session B	
3.40 pm – 4.00 pm	☕ Coffee break	SG0
4.00 pm – 5.30 pm	Posters & Demos B	SG0+SG2
6.00 pm – 8.00 pm	🏠 Private open visit of the Olympic Museum → <a href="#">Go to Olympic museum (40 min)</a> 🍷 (7.00 pm – 8.00 pm) Drink on the terrasse of the Olympic Museum	Olympic Museum
8.00 pm – 10.00 pm	🍽️ Reception at the Olympic Museum restaurant	

## Wednesday, July 24th

9.00 am – 10.00 am	<b>Keynote C: Sylvain Gigan: Imaging with scattered light: wavefront shaping for fluorescence imaging in complex media</b>	SG1
10.00 am – 10.30 am	☕ Coffee break	SG0
10.30 am – 11.00 am	Invited talk: <b>Ivo Ihrke: Computational Imaging across the Scales</b>	SG1
11.00 am – 11.45 pm <b>Oral session E</b> (11-min talks + 4-min Q&A)	<i>Monte Carlo Path Tracing and Statistical Event Detection for Event Camera Simulation</i>	
	<i>High-performance real-world optical computing trained by in situ gradient-based model-free optimization.</i>	
	<i>Deepmarking: Leveraging Adversarial Noise for Membership Inference Attacks</i>	
11.45 am – 12.15 pm	Invited talk: <b>Mark Sheinin: Nothing Lasts Forever: Harnessing Ephemeral Signals for Dynamic Scene Perception</b>	
12.15 pm – 12.45 pm	Closing Remarks, Best paper award, Poster and Demo prize: Sabine Süsstrunk	
12.45 pm – 2.00 pm	🍽️ Lunch / Committee lunch / End of the conference	SG0

General chair: Sabine Süsstrunk  
 Program chairs: Ashok Veeraraghavan, Roarke Horstmeyer, Wolfgang Heidrich  
 Publication chairs:  
 Vivek Boominathan, Akshat Dave  
 Finance chairs: Suren Jayasuriya, Jinwei Ye  
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 Website chairs: Dongqing Wang, Yufan Ren  
 PAMI chair: Boxin Shi  
 Industry consortium chair: Dengxin Dai  
 DEI and outreach chairs: Emma Alexander, John Murray-Bruce  
 Social media chair: Martin Nicolas Everaert  
 Local arrangements chairs:  
 Raphaël Achddou, Nicoletta Isaac



**WIFI:**  
See at registration desk

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