



Workshop program

LOCATION

Technopark Zurich
Technoparkstrasse 1
CH-8005 Zürich
Switzerland

Conference Room „Fortran“, 2nd floor

CONTACTS

Organisation:

Dr. Felix Holzner
holzner@swisslitho.com
+41 77 434 73 63

Dr. Tero Kulmala
kulmala@swisslitho.com
+41 44 500 3808

Dr. Fabian Menges
fam@zurich.ibm.com

Dr. Armin Knoll
ark@zurich.ibm.com

Dr. Bernd Gotsmann
bgo@zurich.ibm.com

Thursday, 30th March 2017

09.00	Registration	<i>in front of room "Fortran"</i>
09.30 – 10.50	Session I	Chair: <i>Urs Dürig</i>
09.30 – 09.40	Welcome Organizers	
09.40 – 10.10	Thermochemical Scanning Probe Lithography Elisa Riedo, CUNY Advanced Science Research Center, New York City	
10.10 – 10.30	Doping of MoS₂ by Thermochemical Nanolithography Annalisa Calo, CUNY Advanced Science Research Center, New York City	
10.30 – 10.50	T-SPL on a glassy supramolecular film creates a combination of topography and fluorescence Samuel Zimmermann, EPFL, Lausanne	
10.50 – 11.20	Break, coffee & snacks	<i>Poster Area "Fortran"</i>
11.20– 12.50	Session II	Chair: <i>Jens Gobrecht</i>
11.20 – 11.50	Exploiting material contrast in 3D lithography: patterning, shape transformation and polishing Robert Kirchner, TU Dresden	
11.50 – 12.10	Accurate fabrication of photonic molecules using closed loop thermal Scanning Probe Lithography Colin Rawlings, SwissLitho AG	
12.10 – 12.30	3D t-SPL silicon nanopatterns fabrication with sub-nanometer scale roughness Yuliya Lisunova, EPFL, Lausanne	
12.30 – 12.50	3D phase plates for electron microscopy Simon Hettler, Karlsruhe Institute of Technology	
12.50 – 14.00	Lunch Coffee & snacks	<i>Technopark Cafeteria</i> <i>Poster Area "Fortran"</i>
14.00 – 15.30	Session III	Chair: <i>Armin Knoll</i>
14.00 – 14.30	Defects and Scalability in Self-Assembled Structures Alex Liddle, NIST, USA	
14.30 – 14.50	Spatial and Temporal Dynamics of Particles Assembling onto Patches Fabricated with t-SPL Keith Carrol, IBM Research Zurich	
14.50 – 15.10	The use of t-SPL for the directed self-assembly of block copolymers Steven Gottlieb, IMB-CNM CSIC, Barcelona	
15.10 – 15.30	Nanoparticle Manipulation with Nanofluidic Brownian Motors Christian Schwemmer, IBM Research Zurich	
15.30 – 16.00	Break, coffee & snacks	<i>Poster Area "Fortran"</i>
16.00 – 17.10	Session IV	Chair: <i>Fabian Menges</i>
16.00 – 16.30	Nanospectroscopy and nanospectrometry—Using heat to map materials at the nanoscale Craig Prater, Anasys Instruments, Santa Barbara	
16.30 – 16.50	Laser trimming of graphene oxide for functional photonic applications Xiaorui Zheng, CUNY Advanced Science Research Center, New York City	
16.50 – 17.10	Nanopatterning magnetic landscapes via thermally assisted scanning probe lithography Edoardo Albisetti, CUNY Advanced Science Research Center, New York City	
17.10 – 18.00	Break, coffee & snacks	<i>Poster Area "Fortran"</i>
18.10 – 21.45	Sunset Dinner Cruise on lake Zurich Bus leaves at main entrance of Technopark at 18:10	

Friday, 31st March 2017

08.30	Registration	
09.00 – 10.30	Session V	<i>Chair: Philip Paul</i>
09.00 – 09.30	High precision fabrication for nanophotonics Saulius Juodkazis, Swinburne University, Melbourne	
09.30 – 09.50	Challenges of high resolution pattern transfer Tero Kulmala, SwissLitho AG	
09.50 – 10.10	High-resolution t-SPL: Fabrication of sub-20 nm devices Yu Kyoung Ryu Cho, IBM Research Zurich	
10.10 – 10.30	Ferromagnetic sidegates for semiconducting nanowire spintronics Andreas Baumgartner, University of Basel	
10.30 – 11.00	Break, coffee & snacks	<i>Poster Area "Fortran"</i>
11.00 – 12.30	Session VI	<i>Chair: Bernd Gotsmann</i>
11.00 – 11.30	Scanning thermal microscopy and nanoscale thermal transport Pierre-Olivier Chapuis, CETHIL, Lyon	
11.30 – 11.50	Comprehensive modeling of Joule heated cantilever probes Martin Spieser, SwissLitho AG	
11.50 – 12.10	Nanoscale thermometry by scanning thermal microscopy Fabian Motzfeld, IBM Research Zurich	
12.10 – 12.30	Heat transport through atomic contacts Nico Mosso, IBM Research Zurich	
12.30 – 14.00	Lunch Coffee & snacks	<i>Technopark Cafeteria</i> <i>Poster Area "Fortran"</i>
14.00 – 15.30	Session VII	<i>Chair: Tero Kulmala</i>
14.00 – 14.30	3D printing of small metallic object with FluidFM Technology Michael Gabi, Cytosurge, Glattbrugg	
14.30 – 14.50	Fabrication of Atomic Scale Memristors using High Resolution t-SPL Bojun Cheng, ETH Zurich	
14.50 – 15.20	Nanoscale surface structures: Ready for mass-replication? Jens Gobrecht, Paul Scherrer Institute, Villigen	
15.20 – 15.30	Closing remarks Organizers	
15.30 – open	Self-organisation of meetings or discussions Coffee & snacks provided	