

Swiss NanoConvention 2016

Tentative Detailed Program

Thursday June 30, 2016

08:00–18:00	Registration open		
09:15–09:30	Opening Session Christian Schönenberger, Swiss Nanoscience Institute, Basel Andrea Schenker-Wicki, Rektorin, University of Basel Ralf Dümpelmann, BaselArea.Swiss		
09:30–11:00	PLENARY A Chair: Klaus Ensslin and Christoph Gerber QSIT talk: Quantum Computing in Silicon with Donor Electron Spins Michelle Y. Simmons University of New South Wales, Sydney Güntherodt lecture: Atomic Force Microscopy to Study Processes of Life from the Cellular to Molecular Scale Daniel Müller D-BSSE ETHZ, Basel		
11:00–11:30	Coffee Break / Exhibition Visit		
11:30–13:00	30 years of AFM Chair: Christoph Gerber & Ernst Meyer Molecules Investigated by AFM with Functionalized Tips Leo Gross IBM, Zurich Vectorial Scanning Force Microscopy Using a Nanowire Sensor Martino Poggio University of Basel, Basel High-Speed Atomic Force Microscopy: The Dawn of Dynamic Structural Biochemistry Simon Scheuring INSERM / Aix-Marseille Université Quantum Sensing and Imaging of Nano-Magnetic Systems Patrick Maletinsky University of Basel, Basel	Nano for Energy Chair: Andreas Hafner Nano for Thin Film CIGS Solar Cells Yaroslav Romanuk Empa, Dübendorf Thermoelectric Properties of Semiconducting Nanowires Ilaria Zardo University of Basel, Basel Nanocomposite Optical Coatings for Solar Energy Applications Andreas Schueler EPFL, Lausanne Photoinduced Long-Range Electron Transfer across Molecular Bridges and Wires Oliver Wenger University of Basel, Basel	CTI Micro/Nano Event Welcome Martina Hirayama & Raymond Zehringer Heads of the Micro- and Nanotechnologies funding area Latest News from CTI Annalise Eggmann Director of the Secretariat, CTI AURORA: Augmented Reality Optical Retinal Display Christophe Moser EPFL Poster Presentations
13:00–14:30	Lunch in Exhibiton and Poster area		
14:30–16:00	Nanobiology Chair: Roderick Lim Mechanical Coupling between Assembly of Endocytic Proteins and Lipid Membrane Deformation Aurélien Roux University of Geneva, Geneva DNA (Origami) Nanopores Ulrich F. Keyser University of Cambridge, Cambridge Protein Nano-Crystallography and the Power of Diffraction Jan Pieter Abrahams University of Basel & PSI, Villigen Molecular Systems Engineering with DNA Hendrik Dietz TU Munich, Munich	Manufacturing Technologies Chair: Jens Gobrecht 3D Laser Lithography: No Limits? Martin Wegener KIT, Karlsruhe Laser Additive Manufacturing of Nano-Structured Materials – Challenges and Opportunities Christian Leinenbach Empa, Dübendorf 3D Printing and Medical Applications - an Overview Ralf Schumacher FHNW, Muttenz As Smooth as Possible – Selective Surface Equilibration of Polymer Topographies Helmut Schiff PSI, Villigen & FHNW, Windisch	CTI Micro/Nano Event Wi-Fi-Based Live Video Trans-mission for Medical Applications Stefan Beetschen & Oliver Brüttsch Bruetsch Elektronik AG Catch the Unique Opportunities of the Swiss Light Source at the PSI for Swiss SMEs Aline Cossy-Gantner, PSI Swiss Light Source Technology Transfer AG, PSI Taper-Free Laser Cutting of Micro-mechanical Moponents Janko Auerswald Trumpf Maschinen AG
16:00–16:30	Coffee Break / Exhibition Visit		
16:30–18:00	PLENARY B Chair: Michel Calame Ascending the Scales: Nano- to Micro- to Macro-Machines for DNA Sequencing Steven A. Henck Roche, Santa Clara CO₂ + H₂O + Sunlight → Chemical Fuels + O₂ Peidong Yang University of California, Berkeley		CTI Micro/Nano Event FluidFM Technology - Go beyond Imaging Pascal Behr Cytosurge AG Keynote: PV on the Path to Becoming Mainstream Patrick Hofer-Noser Meyer Burger Technology AG
18:00	Apéro riche This program is still subject to changes (29/06/2016)		

Friday July 1, 2016

08:00–17:00	Registration open	
09:15–10:45	PLENARY C Chair: Edwin C. Constable Covalent Chemistry beyond Molecules Omar M. Yaghi University of California, Berkeley Everything SLIPS: Design of Novel Omniphobic Nanocoatings Joanna Aizenberg Harvard University, Cambridge	
10:45–11:15	Coffee Break / Exhibition Visit	
11:15–12:45	Imaging, Sensing & Quantum Technology Chair: Michel Calame and Patrick Maletinsky Nano-Scale Structural Characterization of Parkinson's Disease Henning Stahlberg University of Basel, Basel Imaging Nano-Scale Features over Extended Areas and Volumes Oliver Bunk PSI, Villigen Optoelectronic Properties of Single-Molecule Junctions Guillaume Schull Université de Strasbourg, Strasbourg Imaging Magnetism at the Nanoscale with a Single Spin Microscope Vincent Jacques Université de Montpellier & CNRS, Montpellier	Materials Chair: Pierangelo Gröning Bend Light for the Good of All? Adrian von Mühlisen BASF, Basel Towards Integrated Manufacturing of 2D Materials Stephan Hofmann University of Cambridge, Cambridge Designing Materials on the 10-nm Length Scales: From Photovoltaics to Optical Meta-materials Ulrich Steiner Adolphe Merkle Institute, Fribourg Trapping, Reacting and Switching Molecules on Single Layer Hexagonal Boron Nitride Oliver Gröning Empa, Dübendorf
12:45–14:00	Lunch in Exhibiton and Poster area	
14:00–15:30	Nano- & Quantum-Optics and Applications Chair: Christian Bosshard Towards Quantum Hardware with a Semiconductor Quantum Dot Richard Warburton University of Basel, Basel Opto-Valleytronic Imaging of Atomically Thin Semiconductors Alexander Högele LMU, Munich Plasmonics for Optical Security and Filters Benjamin Gallinet CSEM, Muttenz Towards a 2D Platform for Micro- and Nano-Optics Hans Peter Herzig EPFL, Neuchâtel	Functional Surfaces & Interfaces Chair: Werner Rutsch and Wolfgang Meier Tailmade Polymer Monolayers and Networks for the Generation of Novel Microsystems and Engineered Biointerfaces Jürgen Rühle IMTEK, Freiburg Functional Surfaces through Immobilization of Synthetic Nanoarchitectures Gesine Gunkel-Grabole University of Basel, Basel Surface Functionalization of Titanium Implants - Challenges from the Medtech Industrial Perspective Christiane Jung KKS Ultraschall AG, Steinen Lithographic Radiation Grafting: a Versatile Approach to Functional Polymer Surfaces Celestino Padeste PSI, Villigen
15:30–16:00	Coffee Break / Exhibition Visit	
16:00–17:30	PLENARY D Chair: Christian Schönenberger Optical Techniques for Measuring the Dynamics of Viruses Vinothan N. Manoharan Harvard University, Cambridge The Alchemy of Vacuum "Hybridizing Light and Matter" Thomas Ebbesen University of Strasbourg, Strasbourg	
17:30–17:45	Farewell Session Christian Schönenberger, Swiss Nanoscience Institute, Basel	
18:00	Apéro This program is still subject to changes (29/06/2016)	