

Infrared Beamline Workshop Friday 10 April 2015
ETH Zurich, Hönggerberg Campus Building HCI, lecture Hall J7
Final Programme as of 2 April 2015

Session 1	
Chairman Martin Quack (Physical Chemistry, ETHZ)	
08:30	Welcome
08:35 – 08:45	Gabriel Aeppli (Head of the Swiss Light Source) <i>Introduction, The Swiss Light Source</i>
08:45 – 09:15	Sieghard Albert (SLS, PSI and Physical Chemistry ETHZ) <i>Synchrotron-based high resolution FTIR and THz spectroscopy of chiral molecules and molecules of atmospheric and interstellar interest</i>
09:15 – 09:45	Johannes Orphal (KIT and University of Karlsruhe) <i>Remote-sensing of the Earth's atmosphere: needs and challenges for high-resolution infrared spectroscopy</i>
09:45 – 10:15	Georg Mellau (University of Giessen) <i>Unraveling the internal dynamics of small molecules using high-resolution spectroscopy</i>
10:15 – 10:45	Coffee Break
Session 2	
Chairman Alexander Wokaun (PSI and ETH Zurich)	
10:45 – 11:15	Walter Caminati (University of Bologna) <i>High accuracy vibrational energies of large amplitude motions as obtained from rotational studies</i>
11:15 – 11:45	Marek Kreglewski (University of Poznan) <i>Rovibrational structure of 5-methyltropolone</i>
11:45 – 12:15	Stephan Schlemmer (University of Köln) <i>Spectroscopy of molecular ions at highest resolution</i>
12:15 – 12:45	Britta Redlich (FELIX Laboratory, Nijmegen) <i>Opportunities for experiments in the infrared and THz using the FELIX Free Electron Lasers</i>
12:45 – 14:00	Lunch Break

Session 3	
Chairman Frithjof Nolting (Swiss Light Source, PSI)	
14:00 – 14:30	Ben Murdin (Advanced Technology Institute and SEPNet, University of Surrey, Guildford, UK), K.L. Litvinenko, E.T. Bowyer, P.T. Greenland, N. Stavrias, Juerong Li, R. Gwilliam, B. J. Willis, G. Matmon, M.L.Y. Pang, B. Redlich, A.F.G. van der Meer, C.R. Pidgeon, and G. Aepli <i>Ramsey spectroscopy of silicon donors for quantum information applications</i>
14:30 – 15:00	Hans Sigg (SLS-PSI) <i>Ultra-broadband time resolved infrared pump-probe spectroscopy: from semiconductor devices to photo chemistry</i>
15:00 – 15:30	Dirk van der Marel (University Geneva) <i>Perspectives and opportunities for micro-spectroscopy at the Swiss Light Source</i>
15:30 – 15:45	Ines Benmessaoud and Laszlo Forro (EPF Lausanne) <i>Scanning Infrared Microscope Spectroscopy in neurodegenerative diseases</i>
15:45 – 16:00	Axel Keens (Bruker Optics Karlsruhe) <i>The High Resolution Challenge: How to build a FT Spectrometer with more than 11m Optical Path Difference</i>
16:00 – 16:30	Coffee Break
Session 4	
Chairman Martin Quack (Physical Chemistry, ETHZ)	
16:30 – 17:00	Jérôme Faist (Physics, ETH) <i>Quantum cascade laser frequency combs</i>
17:00 – 17:30	Martin Suhm (University of Göttingen) <i>Fighting against structural uncertainty in the gas phase: Insights into hydrogen bond docking preferences at low spectral resolution</i>
17:30 – 18:00	Sonia Melandri (University of Bologna) <i>Accurate spectroscopy for astrophysical investigations: from the rotational spectrum of complex organic molecules in the millimeter and sub-millimeter wave regions to their infrared spectrum</i>
18:00 – 18:30	Sigurd Bauerecker (University of Braunschweig) <i>IR spectroscopy of phase changes of freely suspended supercooled molecules, water particles and droplets</i>
18:30 – 19:00	Peter Hamm (University of Zurich) <i>THz Photon-Echoes in Water?</i>
19:00 – 20:00	<i>General Discussion</i>
ca. 20:00	Informal Dinner