



**Workshop on Nano-Bio-Sensing
Paradigms and Applications**
October 18, 2009 Luzern, Switzerland

-----**Nano-Optics**-----

Nano-photonics for lab-on-a-chip

Peter Seitz / CSEM and EPFL - Swiss Federal Institute of Technology – Lausanne

Highly Sensitive Arrays of Nano-sized SPADs for DNA Detection

Edoardo Charbon / TU-Delft, Technical University of Delft

NEMS-MEMS fluidic systems for cancer biosensors

Pedro Ortiz / Newcastle University

-----**Nano-Electrochemistry**-----

Nanolithography for Electrochemical biosensors

Massimo Tormen / IFNM-Task, Elettra Sinchrotron, Trieste

Quantum Wires and Quantum Dots to improve current-based Bio-sensing

Sandro Carrara / EPFL - Swiss Federal Institute of Technology – Lausanne

Round Table and Lunch Discussion

-----**Nano-Electronics**-----

Nanoelectronic Systems for Sensing and Ultra-low Power Signal Processing

Vijaykrishnan Narayanan / Pennsylvania State University

Nano Devices and Biomolecular Motors, for Diagnostic Kits and Targeted Drug Delivery

Lalit M. Bharadwaj / CSIO – Chandigarh - India

Self-learning neural-nets by using organic materials

Victor Erokhin / Parma University

-----**Nano-Mechanics**-----

Biospecific irreversible fishing coupled with atomic force microscopy on the way to the reverse Avogadro number

Alexander I. Akchakov / Russian Academy of Biomedical Science - Moscow

Nanostencil and inkjet printing for bio-nanotechnology

Jürgen Brugger / EPFL - Swiss Federal Institute of Technology – Lausanne