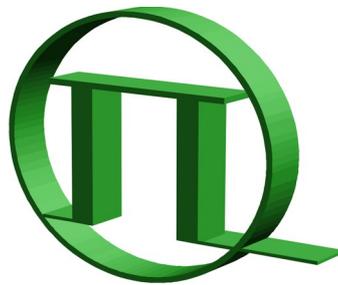


14th International Workshop on “Single Molecule Spectroscopy and Ultrasensitive Analysis in Life Sciences”

Organized by
PicoQuant GmbH



PICOQUANT GmbH
Unternehmen für optoelektronische
Forschung und Entwicklung

Program

September 17 - 19, 2008
at WISTA Campus
Berlin-Adlershof (Germany)

Program (subject to alterations)

Wednesday, 17th September 2008

11.10 - 12.10 REGISTRATION (Conference room: „Max Born Saal“)

Chair: Rainer Erdmann

12.10 - 12.20 Rainer Erdmann, Berlin
Opening Remarks

12.20 - 12.55 Shimon Weiss, Los Angeles (**Invited Paper**)
Single Molecule Probing of Dynamic Conformation, Molecular Interactions and Dynamic Localizations In-Vitro, in Live Cells and in Organisms

12.55 - 13.20 Angel Orte-Gutierrez, Cambridge
Fluorescence Coincidence Spectroscopy for Single Molecule FRET Measurements

13.20 - 13.20 Sigrun Henkenjohann, Bielefeld (*Students Award*)
Monitoring Enzyme Activities by Photoinduced Electron Transfer Probes

13.45 - 14.10 Britta Person, Munich
TrALEX on Holliday and Under the Stars

14.10 - 14.35 Jante Salverda, Leiden
Fluorescent Voltammetry of Immobilized Azurin Reveals Electron Transfer Heterogeneity

14.35 - 15.00 Thorsten Hugel, Munich - Garching
Understanding the Large Conformational Changes and the Slow ATP-Hydrolysis of Hsp90 by smFRET

15.00 - 15.30 COFFEE BREAK

Chair: Shimon Weiss

15.30 - 16.05 Don C. Lamb, Munich (**Invited Paper**)
Single Molecule Investigations of the Role of Chaperons in Protein Folding

16.05 – 16.30 Navid Zarrabi, Stuttgart (*Students Award*)
Monitoring the Conformational Dynamics of a Single Potassium Transporter by ALEX-FRET

16.30 – 16.55 Achillefs Kapanidis, Oxford
DNA Based Sensing of Proteins and Small Molecules Using Single Molecule Fluorescences

- 16.55 - 17.20 Evangelos Sisamakos, Stockholm (*Students Award*)
smFRET Monitoring of Protein-Ligand Interactions Reveals Individual Characteristics of Protein Personalities
- 17.20 - 17.45 Robert Kasper, Bielefeld (*Students Award*)
Mechanistic Studies of Reversible Photoswitching of Carbocyanine Dyes
- 17.45 - 18.10 Jan Vogelsang, München (*Students Award*)
Control of Fluorescence Characteristics by Photoinduced Redox Reactions
- 18.10 - 18.35 Antje Schmidt, Berlin (*Students Award*)
Use of Kaede Fusions to Visualise Recycling of the Corticotropin-Releasing Factor Receptor
- 18.35 Move to „Wista Corner“
- 18.45 RECEPTION („Wista Corner“)

Thursday, 18th September 2008

Chair: Samantha Fore

- 08.45 - 09.20 Fernando Stefani, Barcelona (**Invited Paper**)
Optical Nano-Antennas Direct Single Molecule Emission
- 09.20 - 09.45 Corina Ciobanasu, Bonn (*Students Award*)
Cell-Penetrating HIV1 Tat Peptides Float on Anionic and Neutral Model Lipid Bilayers
- 09.45 - 10.10 Yusdi Santoso, Oxford (*Students Award*)
Probing Biomolecular Dynamics by Single Molecule Gel Electrophoresis
- 10.10 - 10.35 Nathan Wells, Los Alamos
Toward 3-Dimensional Tracking of Protein Tracking in Mammalian Cells
- 10.35 - 11.10 COFFEE BREAK

Chair: Thorsten Wohland

- 11.10 - 11.45 David Nesbitt, Boulder (**Invited Paper**)
Kinetics and Thermodynamics at the Single Molecule Level: Time and Temperature Dependent Docking of RNA Tertiary Interactions
- 11.45 - 12.10 Christian Eggeling, Göttingen
Nanoscale Observations by Far-Field Fluorescence Microscopy
- 12.10 - 12.35 Sebastian van de Linde, Bielefeld (*Students Award*)
Subdiffraction-Resolution Fluorescence Imaging with Conventional Fluorescent Probes

- 12.35 - 13.00 Michael Wahl, Berlin
New Instrumentation for Truly Parallel Multi-channel Photon Timing
- 13.00 GROUP PICTURE
- 13.10 - 14.10 LUNCH
- Chair: Don C. Lamb
- 14.10 - 14.45 Samantha Fore, Sacramento (**Invited Paper**)
Unraveling the Dynamic Interactions of Apolipoproteins with Lipoproteins Particles Using Time Resolved Single Molecule Fluorescence Methods
- 14.45 - 15.10 Andrea Armani, California
Label-free, Single Molecule Detection of Cytokines Based on Resonant Cavity Enhancement
- 15.10 - 15.35 Zhuangxiong Huang, Delft (*Students Award*)
Towards Single Molecule Studies of Telomerase Kinetics in Zero-Mode Waveguides
- 15.35 - 18.30 POSTER SESSION and PRODUCT PRESENTATION
- 20.00 DINNER

Friday, 19th September 2008

Chair: Fernando Stefani

- 08.45 - 09.20 Petra Schwille, Dresden (**Invited Paper**)
FCS in Developmental Biology
- 09.20 - 09.45 Markus Burkhardt, Dresden (*Students Award*)
EMCCD-Based Two-Focus Fluorescence Correlation Spectroscopy
- 09.45 - 10.10 Anastasia Loman, Tübingen (*Students Award*)
Comparative Measurement of Translational and Rotational Diffusion of Bovine Serum Albumin
- 10.10 - 10.35 Felix Koberling, Berlin
Recent Advances in Photon Coincidence Measurements for Photon Antibunching and Full Correlation Analysis
- 10.35 - 11.10 COFFEE BREAK

Chair: David Nesbitt

- 11.10 - 11.35 Dzina Kleshchanok, Aachen
Structure and Dynamics of Polyelectrolyte Layers on Microgel Particles Studied with Dual-Focus FCS

- 11.35 - 12.00 Steffen Rüttinger, Berlin
On the Resolution of Fluorescence Lifetime Correlation Spectroscopy (FLCS) Measurements
- 12.00 - 12.25 Peter Kosovan, Prague (*Students Award*)
Computer Simulations of Rotational Diffusion and Multiple Labeling of Fluorescent Probes in Lipid Vesicle Membranes Probed by FCS
- 12.25 - 12.50 Jörg Mütze, Dresden (*Students Award*)
In Vivo FCS&FCCS Elucidates the RNAi Pathway
- 12.50 - 13.15 Ling Chin Hwang, Oxford
Single Molecule Fluorescence Analysis of the Dynamics of RNA Polymerase in Transcription Initiation
- 13.15 - 14.15 LUNCH

Chair: Petra Schwille

- 14.15 - 14.50 Thorsten Wohland, Singapore (**Invited Paper**)
EMCCD Based Fluorescence Correlation Spectroscopy
- 14.50 - 15.15 Hans Blom, Stockholm
Triplet-State Investigations at Interfaces Using Total Internal Reflection Fluorescence Correlation Spectroscopy (TIR-FCS)
- 15.15 - 15.40 Stanislav Kalinin, Düsseldorf
Characterizing Static and Dynamic Molecular States in Single molecule Multi-Parameter Fluorescence Detection by Probability Distribution Analysis
- 15.40 - 16.05 Kaloian Koynov, Mainz
FCS Studies of Dense Polymer Systems
- 16.05 - 16.15 Rainer Erdmann, Berlin
Presentation of "Students Award"
- 16.15 Concluding Remarks
- 16.25 End of Workshop