

# Workshop on 1D-imaging soft X-ray Spectroscopy at SQS

## Thursday, October 21

09.00-09.05: Serguei Molodtsov (EuXFEL)  
Welcome

09.05-09.25: Michael Meyer (EuXFEL, SQS)  
A short introduction to SQS scientific instrument

09.25-09.55: Joseph Nordgren/Marcus Agåker (Univ. of Uppsala, Sweden)  
A 1-D Imaging Soft X-ray Spectrometer for XFEL Experiments

### 09.55-10.10 Open discussions and questions

### 10.10-10.40 COFFEE BREAK

10.40-10.55: Monica Turcato (EuXFEL, DetOp)  
The multi-delay-line detector

10.55-11.10: Tommaso Mazza (EuXFEL, SQS)  
Beam properties and status for SASE 3 FEL and optical laser

11.10-11.30: Thomas Baumann (EuXFEL, SQS)  
SQS diagnostics and instrumentation

11.30-11.45: Joachim Schulz (EuXFEL, SE)  
Sample environments: liquid jet

11.45-12.00: Johan Söderström (Univ. of Uppsala, Sweden)  
Gaseous samples and molecular beams

### 12.00-12.30 Open discussions

### 12.30-13.30 LUNCH BREAK

13.30-14.00: Victor Kimberg (KTH, Stockholm, Sweden)  
Stimulated X-ray emission in molecules: experience and perspectives

14.00-14.30: Christian Ott (MPIK Heidelberg, Germany)  
Absorption response of resonant atomic electron transitions to intense XUV electric fields

14.30-15.00: Nina Rohringer (DESY, Hamburg, Germany)  
Nonlinear x-ray pump probe experiments in optically dense targets

15.00-15.30: Thomas Fennel (Univ. of Rostock, Germany)  
Tracking ultrafast nanoplasma dynamics:  
time-resolved imaging vs. photoelectron spectroscopy

**15.30-16.00: COFFEE BREAK**

16.00-16.30: Linda Young (Argonne Nat. Lab., USA)  
Towards understanding x-ray propagation through optically thick media

16.30-17.00: James Cryan (PULSE, Stanford, USA)  
Correlation Approaches to Nonlinear Spectroscopy at XFELs

17.00-17.30: Shaul Mukamel (Univ. of California, Irvine, USA)  
Probing Elementary Molecular Events by Ultrafast Multidimensional  
X-ray Spectroscopy and Diffraction

**17.30-19.00: Open discussion**

**Friday, October 22**

09.00-09.30: Benjamin van Kuiken (EuXFEL, SCS)  
Resonant Inelastic X-ray Scattering Experiments in the Solid and Liquid State  
at the SCS Instrument of European XFEL

09.30-10.00: Jan-Erik Rubensson (Univ. of Uppsala, Sweden)  
Time-resolved XES for beginners:  
What do the Small Quantum Systems want to tell us?

**10.00-10.30: COFFEE BREAK**

10.30-11.00: Hans Jakob Wörner (ETH Zürich, Switzerland)  
Time-resolved soft-X-ray spectroscopy in the gas and liquid phases

11.00-11.30: Marc Simon (LCPMR, Sorbonne University, France)  
Perspectives in X-ray emission of Double Core Hole states

11.30-12.00: Riccardo Mincigrucci (Elettra Sincrotrone Trieste, Italy)  
Recent Non-Linear optics results at the EIS instruments

**12.00-13.30: LUNCH BREAK**

**13.30-17.00: Discussion on Community Proposals**

17.00-17.15: Summary of discussion rounds

**17.15: End of Workshop**