



Frontiers in Life Science Technologies at KTH

Imaging, Spectroscopy, Modelling and Simulations – from molecule to man

Location: Oskar Klein Auditorium, Albanova Univ Center, KTH, Stockholm

- 12:00-12:05 Welcome
- 12:05-12:40 **Stefan W Hell, MPIBPC**
Far-Field Optical Nanoscopy – principles and recent advancements
- 12:40-12:55 Hjalmar Brismar, KTH/SCI
Nanoscopy at KTH and SciLifeLab
- 12:55-13:10 Hans Hebert, KTH/STH
High resolution electron microscopy in structural biotechnology
- 13:10-13:25 Hans Hertz, KTH/SCI
Nano- and microimaging with liquid-jet x-ray sources.
- 13:25-13:40 Mats Danielsson, KTH/SCI
X-ray mammography development at KTH
- 13:40-13:55 Johan Hoffman, KTH/CSC
Model based imaging and simulation
- 13:55-14:15 Break
- 14:15-14:50 **Kurt Wüthrich, ETH**
NMR spectroscopy for biomolecular studies
- 14:50-15:05 István Furo, KTH/CHE
Electrokinetic NMR – method, potential, applications
- 15:05-15:20 Hans Ågren, KTH/BIO
Multi-scale modelling of biological spectroscopy
- 15:20-15:35 Jeanette Hellgren-Kotaleski, KTH/CSC
Multi-scale modeling and simulations of the brain
- 15:35-15:50 Jan Linnros, KTH/ICT
Biomolecule detection using silicon nanowires
- 15:50-16:05 Amelie Eriksson-Karlström, KTH/BIO
Molecular imaging of HER2-positive tumors using radiolabeled Affibody molecules
- 16:05-16:25 Break
- 16:25-16:55 **Lior Pachter, Berkely Univ**
Computational biology in genomics
- 16:55-17:10 Erik Aurell, KTH/CSC
Proximity and contact predictions in proteins
- 17:10-17:40 **Nico De Jong, Erasmus Univ**
Ultrasound contrast imaging
- 17:40-17:55 Matilda Larsson, KTH/STH
Improved risk stratification in cardiovascular diseases using ultrasound
- 17:55-18:00 Concluding remarks
- 18:00-20:00 Poster session, mingle and buffet dinner**