**Dutch Biophysics 2015**

**Programme Monday 28 September**

**09.10 - 09.30** Coffee / Tea

**09.30 - 09.45** Opening

**10.00 - 11.30** Single Molecule Experiments I

10.00 - 10.40

- **O.01** N. V'THUIJIN (TUD) Chromosome reorganization by the highly cooperative Dps protein
- **O.02** F. PLOETZ (TU/e) The Story of Single Molecules, from Early Spectroscopy in Solids, to Super-Resolution Nanoscopy in Cells and Beyond
- **O.03** J. LUMENS (TU/e) In vitro reconstitution of microtubule polymerization in an enclosed microfluidic chambers

10.45 - 11.30

- **O.04** S. BAUDOIN (KULeuven) Fabrication and surface functionalization of highly birefringent titanium dioxide nanocylinders for biomolecule detection by magnetic torque tweezers
- **O.14** A. KOCER (UMCG) Magnetic torque tweezers quantify Ca2+ induced changes of cardiac myofilaments
- **O.16** O. KOENIG (TU/e) Giant liposome based system reveals regulation by autoinhibition of KIF21A and KIF21B and their growth inhibition by kinesins

**11.30 - 12.15** Coffee / Tea

**12.15 - 14.00** Microscopy Developments

12.15 - 13.00

- **O.17** J.P. VAN DER VAAL (LEI) Monomer - monomer interactions of targets in large-scale correlative optical microscopy with CLEM
- **O.18** K. van den DRIES (UU) Integrated correlative optical electron microscope (RICS) and electron microscopy with CLEM
- **O.19** J. KEMP (TU/e) Measuring molecular dissipation mechanisms in the crowded and stiffening extracellular networks: Nonlinear elasticity of extracellular matrices

13.00 - 14.00

- **O.20** L. SABATINI (TU/e) Cross-helical order in curved giant liposome based system reveals regulation by autoinhibition of KIF21A and KIF21B and their growth inhibition by kinesins
- **O.21** S. WUNDERLICH (TU/e) The Story of Single Molecules, from Early Spectroscopy in Solids, to Super-Resolution Nanoscopy in Cells and Beyond
- **O.22** S. SEMRAU (KU Leuven) Measuring molecular dissipation mechanisms in the crowded and stiffening extracellular networks: Nonlinear elasticity of extracellular matrices

13.45 - 14.30 Coffee / Tea

**14.30 - 16.00** Single Molecule Experiments II

14.30 - 15.15

- **O.23** H. MIZUNO (U) Nonlinear mediator interactions regulate membrane protein receptor function affecting lateral mobility patterns, binding strength and endocytic capacity
- **O.24** M. N. BISSMEIJER (TU/e) Quantitative time-lapse electron microscope (ETEM) studies of targets in large-scale membrane biophysics with CLEM
- **O.25** G. M. R. DE LUCA (TU/e) Single-molecule imaging of exosomal protein studies

15.15 - 16.00

- **O.26** H. MIZUNO (U) Nonlinear mediator interactions regulate membrane protein receptor function affecting lateral mobility patterns, binding strength and endocytic capacity
- **O.27** K. van den DRIES (UU) Integrated correlative optical electron microscope (RICS) and electron microscopy with CLEM
- **O.28** J. KEMP (TU/e) Measuring molecular dissipation mechanisms in the crowded and stiffening extracellular networks: Nonlinear elasticity of extracellular matrices

**16.00 - 18.00** Poster Session

**18.00 - 19.30** Closing Remarks & Poster Prize Award

**19.30 - 20.00** Dinner

**20.00 - 20.15** Best Poster Award (100 numbers)

**20.15 - 20.30** Coffee / Tea