

**Annual Dutch meeting on Molecular and Cellular Biophysics - Programme Monday 1 October 2012**

09.30 - 10.30	Arrival / registration / coffee & tea			<b>Room: Kempenthal</b>
10.35 - 10.45	Opening			<b>Room: Brabantzaal</b>
10.45 - 11.15	I.1	<b>J.W. Shaevitz</b> (Princeton University) <i>Big structures, little molecules</i>	<b>Room: Brabantzaal</b>	
11.20 - 11.50	I.2	<b>R.T. Dame</b> (Leiden University) <i>Unravelling the role of chromatin proteins in archeal nucleoid organization</i>	<b>Room: Brabantzaal</b>	
11.55 - 12.25	I.3	<b>F. Reggiori</b> (UMC Utrecht) <i>A closer look into membrane dynamics during autophagy</i>	<b>Room: Brabantzaal</b>	
12.30 - 13.30	Lunch			<b>Room: Kempenthal</b>
<b>Room:</b> <i>session</i>	<b>Brabantzaal</b> <i>Membrane systems</i>	<b>Diezehal</b> <i>Biomolecular spectroscopy I</i>	<b>Gender Foyer</b> <i>Cytoskeletal organization</i>	<b>Baroniezaal</b> <i>Single-molecule and superresolution light microscopy</i>
13.30 - 13.45	O.01	<b>J. Otterstrom</b> (RUG) <i>Broadly neutralizing antibodies inhibit hemifusion directly: single-particle viral fusion confirmation and stoichiometry requirements</i>	O.04	<b>M. Kloz</b> (VU) <i>Wavelength modulated and high-gain femtosecond stimulated raman spectroscopy – molecular vibrations resolved beyond the Heisenberg limit</i>
13.50 - 14.05	O.02	<b>A. Cambi</b> (RU) <i>DC-SIGN structure relates membrane spatiotemporal organization to virus-binding function</i>	O.05	<b>L. Tian</b> (WUR) <i>Site, rate and mechanism of photoprotective quenching in cyanobacteria - time resolved fluorescence kinetics studies both in vivo and in vitro</i>
14.10 - 14.25	O.03	<b>A. Kedrov</b> (RUG) <i>Oligomerization of YidC is required for membrane protein insertion</i>	O.06	<b>H. Meuzelaar</b> (UvA) <i>A time-resolved vibrational study of the thermal unfolding of Trp-cage: a two-state folder?</i>
14.30 - 14.55	Coffee & tea			<b>Room: Kempenthal</b>
<b>Room:</b> <i>session</i>	<b>Brabantzaal</b> <i>Novel single molecule methods</i>	<b>Diezehal</b> <i>Biomolecular spectroscopy II</i>	<b>Gender Foyer</b> <i>Membrane biophysics</i>	<b>Baroniezaal</b> <i>Light microscopy of cells</i>
15.00 - 15.15	O.13	<b>S.R. Ripp</b> (RU) <i>Electronic detection of single enzyme activity</i>	O.16	<b>P. Zijlstra</b> (TU/e) <i>Plasmonic detection of single non-absorbing molecules using a gold nanorod</i>
15.20 - 15.35	O.14	<b>M.M. van Oene</b> (TUD) <i>Studying the bacterial flagellar motor using an optical torque wrench</i>	O.17	<b>A. Dimitrova</b> (RUG) <i>Repeatable and reversible activation of an ion channel by interfering with its interaction with the lipid bilayer</i>
15.40 - 15.55	O.15	<b>A. Ghavami</b> (RUG) <i>Probing the disordered domain of the nuclear pore complex</i>	O.18	<b>G. Diaz Leines</b> (UvA) <i>Mapping the free energy profile along the most likely transition path of the light-induced unfolding of photoactive yellow protein</i>
16.00 - 18.00	<b>Coffee &amp; tea and Poster session 1 (odd numbers)</b>			<b>Room: Kempenthal</b>
18.00 - 19.30	<b>Dinner</b>			<b>Room: Genderhal</b>
19.30 - 20.00	<b>Coffee</b>			<b>Room: Kempenthal</b>
20.00 - 21.00	I.4	<b>O. Medalia</b> (University of Zurich, Ben-Gurion University) <i>Visualizing cellular processes at the molecular level by cryo-electron tomography</i>	<b>Room: Brabantzaal</b>	

**Annual Dutch meeting on Molecular and Cellular Biophysics - Programme Tuesday 2 October 2012**

09.00 - 09.30	I.5 <b>G.D. Scholes</b> (University of Toronto) <i>Lessons from nature about solar light harvesting: a little bit of coherence?</i>	<b>Room: Brabantzaal</b>		
09.35 - 10.05	I.6 <b>M. Depken</b> (Delft University of Technology) <i>Paranoid polymerases: the price of being right in a molecular environment</i>	<b>Room: Brabantzaal</b>		
10.10 - 10.25	Coffee & tea			
	<b>Room: Kempenhal</b>			
<b>Room:</b> <i>session</i>	<b>Brabantzaal</b> <i>DNA &amp; DNA-binding proteins</i>	<b>Diezehal</b> <i>Force generation and sensing</i>	<b>Gender Foyer</b> <i>Cellular biophysics</i>	<b>Baroniezaal</b> <i>Electron microscopy</i>
10.30 - 10.45	O.25 <b>M.T.J. van Loenhout</b> (TUD) <i>Dynamics of DNA supercoils</i>	O.28 <b>M.F. Jose</b> (RUG) <i>On the gating mechanism of a mechanosensitive channel of large conductance, MscL: determining the role of individual domains of MscL in its gating</i>	O.31 <b>E. Katrukha</b> (UU) <i>Self-organization of dynamic transport network in 2D cells</i>	O.34 <b>M. Karreman</b> (UU) <i>Introducing novel sample preparation procedures for correlative microscopy of a single specimen</i>
10.50 - 11.05	O.26 <b>S.J. Heerema</b> (VU) <i>Sliding, pausing and bridging: how human XRCC4 and XLF interact with DNA</i>	O.29 <b>B. Prevo</b> (VU) <i>Illuminating the intraflagellar transport machinery in the sensory cilia of Caenorhabditis elegans</i>	O.32 <b>S. Boulineau</b> (AMOLF) <i>Single-cell dynamics reveals sustained growth during diauxic shift</i>	O.35 <b>R. Koning</b> (LUMC) <i>Development of a workflow for cryo correlative light and electron microscopy</i>
11.10 - 11.25	O.27 <b>D. Burnham</b> (TUD) <i>Observing HepA related protein (HARP) re-anneal dsDNA bubbles</i>	O.30 <b>J. Teapal</b> (WUR) <i>Push don't pull: a yeast model for multinucleated cells</i>	O.33 <b>F. Wu</b> (TUD) <i>Spatial dependence of chromosome positioning in Escherichia coli revealed by nanostructure-defined cell shaping</i>	O.36 <b>M. Vulovic</b> (TUD) <i>Modelling of image formation for cryo electron microscopy</i>
11.30 - 13.25	<b>Poster session 2 (even numbers) and lunch</b>			
	<b>Room: Kempenhal</b>			
11.45 - 12.15	<b>NVvM programme:</b>			
12.20 - 12.50	- NVvM General Assembly			
12.55 - 13.25	- Netherlands Centre for Electron Nanoscopy (NeCEN) progress report			
	- NL-BioImaging Advanced Microscopy meeting			
<b>Room:</b> <i>session</i>	<b>Brabantzaal</b> <i>Force spectroscopy</i>	<b>Diezehal</b> <i>Systems biophysics</i>	<b>Gender Foyer</b> <i>New techniques and methods</i>	<b>Baroniezaal</b> <i>Light microscopy techniques</i>
13.30 - 13.45	O.37 <b>H. Meng</b> (LEI) <i>Single-molecule force spectroscopy reveals a left-handed helical folding for the 30-nm chromatin fiber</i>	O.40 <b>J.S. van Zon</b> (AMOLF) <i>Stochastic gene expression aids robust spatial patterning of cell fates in C. elegans vulva development</i>	O.43 <b>H.K.P. Mulder</b> (UT) <i>Size-selective detection in integrated optical interferometric biosensors</i>	O.46 <b>R.P.J. Nieuwenhuizen</b> (TUD) <i>Fourier image resolution in optical nanoscopy</i>
13.50 - 14.05	O.38 <b>D. Dulin</b> (TUD) <i>Backtracking and other off-pathway pauses control the dynamics of a viral RNA-dependent RNA polymerase powered by power-strokes</i>	O.41 <b>J.P.J. Junker</b> (MIT) <i>Quantitative analysis of the hedgehog signaling pathway reveals complex interplay between activating and repressing factors</i>	O.44 <b>A.J. Katan</b> (TUD) <i>Direct visualization of DNA-protein interaction dynamics by high speed atomic force microscopy in liquid</i>	O.47 <b>B. De Clerq</b> (Univ. Hasselt) <i>Rectangular fluorescence recovery after photobleaching (rFRAP): detecting anomalous diffusion by exploiting the spatial information available in the recovery images</i>
14.10 - 14.25	O.39 <b>S. Bezrukavnikov</b> (AMOLF) <i>Investigation of DnaKJE chaperone activity at the single molecule level</i>	O.42 <b>T.R. Sokolowski</b> (AMOLF) <i>Enhancing pattern stability in embryogenesis by mutual repression</i>	O.45 <b>I. Heller</b> (VU) <i>Zooming in on DNA-protein interactions: optical tweezers combined with confocal and STED microscopy</i>	O.48 <b>T.I.M. van Werkhoven</b> (LEI/UU) <i>Direct wavefront sensing for adaptive optics in multi-photon microscopy</i>
14.35 - 15.05	I.7 <b>D. Discher</b> (University of Pennsylvania) <i>The nuclear mechanostat that scales with tissue stiffness and amplifies lineage: Lamin-A,C</i>	<b>Room: Brabantzaal</b>		
15.10 - 15.40	I.8 <b>B. Poolman</b> (University of Groningen) <i>Traffic in crowded environments and osmosensing mechanisms of membrane transport proteins</i>	<b>Room: Brabantzaal</b>		
15.45 - 15.50	Closing remarks			