



TAU– PU Workshop on Nano-bio-physics

March 13, 2017, Hall 315 Multidisciplinary building, Tel Aviv University



Program

9:00-9:15 Opening

Session 1 – Nanobiophotonics

9:15-9:45 Hans-Gerd Löhmannsröben: *Laser Spectroscopy and Fibre-Optical Sensing for (Bio) Chemical Diagnostics*

9:45-10:05 Youngeun Choi: *Bright fluorescence labels based on DNA nanostructure*

10:05-10:35 Alexander Kotlyar: *Selective Eradication of Cancer Cells Using DARPin coated Gold Nanoparticles*

10:35-10:55 Gil Nifker: *Chemo-Enzymatic labeling of the epigenetic DNA Modification 5-hydroxymethylcytosine*

10:55-11:15 Christian Heck: *Gold and silver nanolenses self-assembled by DNA origami*

11:15-11:40 **Coffee break**

Session 2 – Magnetic Resonance

11:40 – 12:10 Heiko Möller: *Spying on Biomolecular Interactions by NMR*

12:10 – 12:40 Amir Goldbourt: *Structural effects of single mutations in a filamentous viral capsid across multiple length scales*

12:40 – 13:00 Tom Aharoni: *Automation of Solid State NMR spectral cross-peaks assignment for the analysis of structure and dynamics of macromolecules*

13:00 – 14:00 **Lunch break**

Session 3 – Nanobiophotonics

14:00 – 14:30 Yuval Ebenstein: *Single-molecule genomics*

14:30-14:50 Robin Schürmann: *Plasmon induced reactions of DNA on metal nanoparticles*

14:50- 15:10 Stefanie Vogel: *Sequence-specific ionization potentials of oligonucleotides correlated with VUV-induced DNA strand breaks*

15:10- 15:35 **Coffee break**

15:35- 16:05 Gil Markovich: *Enantio-specific synthesis of lanthanide based chiral nanocrystals*

16:05-16:35 Dennis Klier: *Upconversion nanoparticles as versatile optical probes in life science application*

