## 3<sup>rd</sup> Announcement

## Kick-off meeting of the new research center project of Charles University Center of Nano- and Bio-Photonics (UNCE/SCI/010)

## Optical imaging and spectroscopy of nanomaterials and biosystems: From single-molecules to functional ensembles

March 16<sup>th</sup> (Friday), 2018, 9:00 – 16:10 (approximately)

Faculty of Mathematics and Physics, Ke Karlovu 3, Prague 2, Room 252 (2<sup>nd</sup> floor)

## Aim

Presentation of activities in the field of nano- and bio-photonics by junior and senior members of the Center. Several talks by foreign and local guests working in the same field of research will be included. Language: The talks will be performed in English

Preliminary titles and times of talks (junior members of the center are indicated in green):

9:00-9:30 Jan Linnros: Probing silicon quantum dots by single-dot techniques

9:30-9:50 Martin Vácha: Nanoscale properties of organic materials and complex soft matter studied by single-molecule spectroscopy

9:50-10:10 Marek Piliarik: High-fidelity fast tracking of single protein dynamics

10:30-10:50 Marek Procházka: New metal nanostructured-surfaces for sensitive surface-enhanced Raman spectroscopy (SERS) of biomolecules

10:50-11:10 Václav Profant: Raman optical activity spectroscopy as a tool for the absolute configuration determination of biologically important molecules

11:10-11:30 Ondřej Pavelka: Golden-core composite nanoparticles

11:30-11:50 Anna Fučíková: Bio-AFM: Current status and future measurements

13:00-13:20 Xiaohui Ju: Surface characterization of polymer-coated nanoceria and its antioxidant activity

13:20-13:40 Michael Greben: Time-resolved photoluminescence: probing the fraction of dark Si nanocrystals

13:40-14:00 Tomáš Mančal: Nature's lessons for Light-harvesting Technologies

14:00-14:20 Sayeh Rajabi: Fluorographene with Impurities as a Biomimetic Light-Harvesting Medium

14:30-14:50 Jakub Pšenčík: Primary processes of photosynthesis as an inspiration for new ways of solar energy utilization

14:50-15:10 Jan Alster: Application of 2D electronic spectroscopy to study of (bio)molecular systems

15:10-15:30 Heiko Lokstein: Towards Biohybrid Devices for PhotoBioTechnology

15:30-15:50 Roman Dědic: Singlet Oxygen Feedback Delayed Fluorescence Imaging of Photosensitizers in Cells

15:50-16:10 Petr Malý: Femtosecond spectroscopy of electrons and phonons in semiconductors