



PROGRAMME

Wednesday, May 16, 2012

10:00-12:30 *Registration*

12:30-14:00 *Lunch*

14:00-14:10 *Welcome*

Session I, chair V. Sklenář

14:10-14:40 *Keynote 1*

H. Schwalbe: NMR spectroscopic studies of the complementary G-quadruplex and i-motif DNA structures.

14:40-15:00 **Szymon Źerko:** 7D NMR experiments for protein backbone assignment.

15:00-15:20 **Kristaps Jaudzems:** Structural studies of spider silk N-terminal domain: insights into the mechanism of fibre formation.

15:20-16:00 *Coffee Break*

Session II, chair H. Schwalbe

- 16:00-16:20 **Stefano Elli**: Conformational and dynamic properties of Human ($\alpha 2 \rightarrow 6$) and Avian ($\alpha 2 \rightarrow 3$) sialylated receptors of influenza A virus haemagglutinin.
- 16:20-16:40 **Saurabh Saxena**: The sequential analysis of intrinsically disordered proteins using a set of multidimensional (5D) NMR experiments acquired with non-uniform sampling.
- 16:40-17:00 **Mateusz Urbanczyk**: Iterative Thresholding Algorithm for Multi-exponential Decay applied to PFG NMR data.
- 18:30 *Dinner*

Thursday, May 17, 2012

Session III, chair A. Perczel

- 9:00-9:30 Keynote 2
M. Pons: Biomolecular interactions of the intrinsically disordered Unique domain of cSrc.
- 9:30-9:50 **Ivica Kukurová Just**: Comparison of 31P GOIA-1D-ISIS/2D-CSI to conventional 2D-CSI at 7T: Pulse profile and localization performance.
- 9:50-10:10 **Michal Štujber**: NMR Structural Analysis of a Novel Triterpenoid Saponin Extracted from *Bellis Perennis* L.
- 10:10-10:50 *Coffee Break*

Session IV, chair S. Bekiroglu

- 10:50-11:10 **Min-Ji Shin**: ^1H Nuclear magnetic resonance spectroscopy based Human serum Metabolic profiling in Type 2 diabetes and controls.
- 11:10-11:30 **Andrea Gálisová**: Animal model of vascular dementia studied by *ex vivo* magnetic resonance microimaging and histology.
- 11:30-11:50 **Michal Kaliňák**: Changes in intracellular metabolites during life cycle of *Trichoderma viride*.
- 12:15-14:00 *Lunch*

Session V, chair M. Pons

- 14:00-14:30 Keynote 3
A. Perczel: A dead-end street of protein folding?
- 14:30-14:50 **Zuzana Barbieriková**: EPR Spectroscopy Application in the Studies of Photoinduced Processes.
- 14:50-15:10 **Miroslava Bobeničová**: Reactive Oxygen Species in Irradiated Titanium Dioxide Suspensions (An EPR Study).
- 15:10-15:40 Keynote 4
V. Sklenář: NMR heading high - Assignment strategies for partially disordered proteins.

15:40-16:15 *Coffee Break*

16:15-17:00 Poster Session I

17:30-22:00 *Social Programme*

Friday, May 18, 2012

Session VI, chair M. Hricovíni

09:00-9:30 Keynote 5
O. Malkina: NMR spin-spin couplings through a hydrogen bond and overlap of densities of localized molecular orbitals.

9:30-9:50 **James Asher**: Calculation of Benzosemiquinone EPR properties with inclusion of Dynamical Effects.

9:50-10:10 **Anežka Křístková**: Efficient implementation of NMR spin-spin coupling in the framework of four-component mDKS method.

10:10-10:40 *Coffee Break*

Session VII, chair V.G. Malkin

10:40-11:00 **Peter Bystrický**: NMR Study of *Ralstonia Solanacearum* lectin interactions.
11:00-11:20 **Mária Vilková**: Definitive assignment of allobetulin chemical shifts.

11:20-12:20 Poster Session II
12:20-12:30 Closing

12:30-14:00 *Lunch*