

Biomolecular NMR with Non-Uniform Sampling

A hands-on PhD course (2 ECTS)

- Venue:** Swedish NMR Centre, University of Gothenburg
- Dates:** 20-23 Nov 2012
- Target group:** PhD students and researchers with projects involving protein characterization by NMR
- Organizers:** Vladislav Orekhov, Swedish NMR Centre, Univ. of Gothenburg
Martin Billeter, Chem. and Mol. Biology, Univ. of Gothenburg
- Information:** will be posted at <http://www.nmr.gu.se/english/courses/>
- Registration:** by e-mail to orov 'at' nmr.gu.se; deadline - 2 Nov 2012; registration fee - none; number of participants is limited

Teachers:

- Billeter, Martin, *Univ. of Gothenburg, Sweden*
- Brutscher, Bernhard, *Inst. de Biologie Structurale, France*
- Hyberts, Sven, *Harvard Medical School, USA*
- Kazimierczuk, Krzysztof, *Warsaw University, Poland*
- Mayzel, Maxim, *Univ. of Gothenburg, Sweden*
- Orekhov, Vladislav, *Univ. of Gothenburg, Sweden*
- Zawadzka-Kazimierczuk, Anna, *Warsaw University, Poland*

Topics:

- Concepts of fast spectroscopy
- Setting-up NUS experiment
- Fast pulsing methods
- Targeted Acquisition
- Real-time spectroscopy
- Processing NUS spectra using Compressed Sensing, Forward Maximum Entropy, Iterative Soft Thresholding, Multi-Dimensional Decomposition, Sparse Multi-Dimensional Fourier Transform.
- Protein characterization with SMFT or projection--decomposition