

## Modern Methods of Time-Frequency Analysis II

September 10 - December 15, 2012

Organized by: Hans Georg Feichtinger and Karlheinz Gröchenig

Workshop on “Applied Coorbit Theory”: September 17 - 21

Organized by: Stephan Dahlke and Hans Georg Feichtinger

- **Monday, September 17, 2012**

**10:00:** Opening and joint registration

**10:30 – 11:30:** Morten Nielsen

*Decomposition type smoothness spaces*

**11:30 – 11:45:** coffee break

**11:45 – 12:15:** Philipp Grohs

*On the structure of anisotropic frames*

**12:15 – 12:45:** Benjamin Scharf

*Wavelets for reinforced function spaces on cubes*

**12:45 – 15:00:** lunch break

**15:00 – 15:30:** Wen Yuan

*Function Spaces of Besov-type and Triebel-Lizorkin-type*

**15:30 – 16:00:** Jan Vybiral

*Non-smooth atomic decompositions and applications to traces and pointwise multipliers*

- **Tuesday, September 18, 2012**

**10:00 – 11:00:** Gérard Kerkyacharian

*From Statistical estimation to frame construction: The heat kernel point of view G. Kerkyacharian [joint work with T. Coulhon, P. Petrushev]*

**11:00 – 11:30:** coffee break

**11:30 – 12:00:** Pencho Petrushev

*Besov and Triebel-Lizorkin spaces in the general framework of Dirichlet spaces*

**12:00 – 12:30:** George Kyriazis

*On the construction of bases and frames for general distribution spaces*

**12:30 – 14:30:** lunch break

**14:30 – 15:00:** Tino Ullrich

*Generalized Coorbit Space Theory for Quasi-Banach Spaces*

**15:00 – 15:30:** Catherine Schnackers

*Modulation spaces associated to Orlicz spaces and mixed-norm Orlicz spaces*

**18:10 – 21:10:** Social event at NuHAG, Alserbachstrasse 23

- **Wednesday, September 19, 2012**

**10:00 – 11:00:** Gabriele Steidl

*Shearlet Coorbit Spaces*

**11:00 – 11:30:** coffee break

**11:30 – 12:00:** Gerd Teschke

*Coorbit theory, multi-alpha-modulation frames and the concept of structured sparsity for medical multi-channel imaging*

**12:00 – 12:30:** José Luis Romero

*Phase space covers*

**12:30 – 14:30:** lunch break, free afternoon

- **Thursday, September 20, 2012**

**10:00 – 11:00:** Ernesto De Vito

*Reproducing formula associated with symbols*

**11:00 – 11:30:** coffee break

**11:30 – 12:00:** Filippo De Mari

*Quadratic symbols: metaplectic reproducing groups*

**12:00 – 12:30:** Jens Gerlach Christensen

*On the use of smooth vectors in coorbit theory*

**12:30 – 14:30:** lunch break

**14:30 – 16:55:** Hans Georg Feichtinger

*The landscape of COORBIT THEORY: known and less known territories: moderated discussion*

- **Friday, September 21, 2012**

**09:30 – 10:30:** Hartmut Führ

*Coorbit spaces and wavelet coefficient decay over general dilation groups*

**10:30 – 11:00:** Yoshihiro Sawano

*A new framework for generalized Besov-type and Triebel-Lizorkin-type spaces*

**11:00 – 11:30:** coffee break

**11:30 – 12:00:** Margit Pap

*Better atomic decomposition results in the weighted Bergman spaces by applying the unified approach of the atomic decompositions of Feichtinger and Groechenig*

**12:00 – 12:30:** Luis Daniel Abreu

*Can you hear the shape of a localization domain?*

**All lectures take place in the ESI Boltzmann Lecture Hall**

For further information visit: [www.nuhag.eu/esi12](http://www.nuhag.eu/esi12)