

Modern Methods of Time-Frequency Analysis II
Programme organized by:
Hans-Georg Feichtinger and Karlheinz Gröchenig
September 10 - December 15, 2012

Phase space methods for pseudodifferential operators
Workshop organized by:
Karlheinz Gröchenig, Maarten de Hoop and Michael Ruzhansky
October 15 - 19, 2012

• **Monday, October 15, 2012**

9:45 Welcome and Registration

10:15 - 11:00 Stéphane Jaffard

Pseudodifferential operators and stochastic processes

11:00 - 11:30 coffee break

11:30 - 12:15 Alberto Parmeggiani

Spectra of polynomial-coefficient differential systems: the case of Non-Commutative Harmonic Oscillators

12:15 - 14:30 lunch break

14:30 - 15:15 Ingo Witt

Degenerate pseudodifferential operators of Vishik-Grushin type

15:15 - 15:45 break

15:45 - 16:30 Maurice De Gosson

Maximal groups of symmetries for pseudodifferential operators

• **Tuesday, October 16, 2012**

10:00 - 10:45 Marius Mantoiu

Quantization rules and coorbit spaces for families of bounded operators

10:45 - 11:15 coffee break

11:15 - 12:00 Baoxiang Wang

α -Modulation Spaces (I) Scaling, Embedding and Algebraic Properties

12:00 - 14:30 lunch break

14:30 - 15:15 Elena Cordero

Gabor Representations of evolution operators

15:15 - 15:45 break

15:45 - 16:30 Joachim Toft

Multiplication properties in pseudo-differential calculus with small regularity assumptions on the symbols

18:00 - 20:30 Social Event

- **Wednesday, October 17, 2012**

10:00 - 10:45 Maarten V. de Hoop

Reverse-time-migration based inverse scattering using the dyadic parabolic decomposition of phase space

10:45 - 11:15 coffee break

11:15 - 12:00 Mitsuru Sugimoto

Optimal constants and extremisers for some smoothing estimates

12:00 - 12:45 Abdesslam Boulkhemair

On paradifferential operators and canonical transformations

- **Thursday, October 18, 2012**

10:00 - 10:45 Michael Ruzhansky

Gevrey spaces and ultradistributions on compact Lie groups and homogeneous spaces

10:45 - 11:15 coffee break

11:15 - 12:00 Ville Turunen

Sharp Garding inequality on compact Lie groups

12:00 - 14:30 lunch break

14:30 - 15:15 Jens Wirth

Classes of pseudodifferential operators on compact Lie groups and global hypoellipticity

15:15 - 15:45 break

15:45 - 16:30 Julio Delgado

On the nuclearity of pseudodifferential operators on compact Lie groups

- **Friday, October 19, 2012**

10:00 - 10:45 Goetz Pfander

New results on the boundedness of linear and multilinear pseudodifferential operators on L^p , Sobolev and modulation spaces

10:45 - 11:15 coffee break

11:15 - 12:00 Rodolfo H. Torres

A new geometric regularity condition for the endpoint estimates of bilinear Calderón-Zygmund operators

12:00 - 12:45 Arpad Benyi

Compact bilinear operators and commutators

All lectures as well as the registration take place in the ESI Boltzmann Lecture Hall