



## Session 17

### PSEUDO-DIFFERENTIAL OPERATORS

Organisers: Joachim Toft (Växjö), Luigi Rodino (Torino)  
and M. W. Wong (Toronto)

August 05 / 2013, Room 111N

14:30--15:00

Mikhail Agranovich, Elementary approach to fractional powers of strongly elliptic operator in Lipschitz domains

15:00--15:30

Anton Selitskij, The space of initial data for parabolic differential-difference operators

15:30--16:00

Coffee/tea break

16:00--16:30

Kunio Yoshino, Spectral analysis of Daubechies operators

16:30--17:00

Jiawei Li, Localization operators for ridgelet transforms

17:00--17:30

Luigi Riba, Multi-dimensional Stockwell transforms with applications to instantaneous frequencies of multi-dimensional signals

17:30--18:00

I. Julio Delgado, Schatten classes and  $r$ -nuclearity on compact Lie groups

18:00--18:30

Evgeniya Dychenko, On ellipticity of pseudo-differential equations with small parameter

18:30--19:00

Magnus Goffeng, Refining Schatten class properties of Hankel operators



**August 06 / 2013, Room 111N**

12:10--12:40

Viorel Catană, Sobolev estimates and spectra for generalized SG-hypoelliptic pseudo-differential operator on  $L^p(\mathbb{R}^n)$

12:40--13:10

Niyaz Tokmagambetov, Generalized Fourier transform and pseudo-differential operators

13:10--14:30

Lunch break

14:30--15:00

Ivan Ivec, Boundedness of pseudo-differential operators on Lebesgue spaces with mixed norm

15:00--15:30

Xiaoxi Duan, Spectral theory of the Hermite operator on  $L^p(\mathbb{R}^n)$

15:30--16:00

Coffee/tea break

16:00--16:30

Giorgia Tranguilli, Hypoellipticity and solvability for classes of second order Shubin operators with nonhypoelliptic symbols

16:30--17:00

Chisato Iwaski, Construction of the fundamental solution for a Grushin operator and its applications

17:00--11:30

Gianluca Garello,  $L^p$  microlocal properties for vector weighted pseudo-differential operator with smooth symbols

17:30--18:00

Patrik Wahlberg, The equality of the homogeneous and the Gabor wavefront set

18:00--18:30

Vladimir Rabinovich, Diffraction by periodic graphs

18:30--19:00

Ana Moura Santos, Toeplitz operators and boundary value problems of wave diffraction by gratings

**August 08 / 2013, Room 111N**

Join with Session 8

14:30--15:00

M. W. Wong, Pseudo-differential operators for Weyl transforms



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15:00--15:30

Joachim Toft, Modulation spaces, harmonic analysis and pseudo-differential operators

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15:30--16:00

Coffee/tea break

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16:00--16:30

Luigi Rodino, Ancestors and birth of pseudo-differential operators

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**August 09 / 2013, Room 111N**

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12:10--12:40

Veronique Fischer, Pseudo-differential operators on Lie groups

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12:40--13:10

Chiara Boiti, The overdetermined Cauchy problem in small Gevrey classes

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13:10--14:30

Lunch break

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14:30--15:00

Ahmed Dali, Multi-quasiellipticity and Gevrey regularity of hypoelliptic differential operators

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15:00--15:30

Lorenzo Galleani, Computing the time-frequency solution of a differential equation with the generalized input/output method

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15:30--16:00

Coffee/tea break

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16:00--16:30

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16:30--17:00

Ville Turunen, Properties and computation of Born-Jorda related time-frequency distributions

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17:00--17:30

Hongmei Zhu, Frame-based efficient computational schemes for discrete time-frequency analysis

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