

PROGRAM OF THE SUMMER SCHOOL
“Modern Problems in PDEs and
Applications”

23 August – 2 September 2023

Ghent Analysis & PDE Center

Ghent University



Wednesday 23 August	Auditorium Leslokaal 3.1 Krijgslaan 281, Building S8, Ghent University
9:30 – 10:00	Registration/ Opening
10:00 – 10:45	Simon Scott: <i>Fibrewise Geometric Analysis</i>
11:00 – 11:45	Simon Scott: <i>Fibrewise Geometric Analysis</i>
12:00 – 14:00	Lunch Break
14:00 – 14:45	Elmar Schrohe: <i>Analysis on manifolds with conical singularities</i>
15:00 – 15:45	Elmar Schrohe: <i>Analysis on manifolds with conical singularities</i>
15:45 – 16:15	Refreshments
16:15 – 17:00	Problem Sessions

Thursday 24 August	Auditorium Leslokaal 3.1 Krijgslaan 281, Building S8, Ghent University
9:30 – 10:00	Registration
10:00 – 10:45	Elmar Schrohe: <i>Analysis on manifolds with conical singularities</i>
11:00 – 11:45	Simon Scott: <i>Fibrewise Geometric Analysis</i>
12:00 – 14:00	Lunch Break
14:00 – 14:45	Nikos Yannakakis: <i>Cordes condition, Campanato nearness and beyond</i>
15:00 – 15:45	Nikos Yannakakis: <i>Cordes condition, Campanato nearness and beyond</i>
	Short Talks
16:10 – 16:20	Frederick Maes: <i>Inverse source problems for space-dependent sources in thermoelastic systems</i>
16:30 – 16:40	Daulet Nurakhmetov: <i>Symmetry equivalences and dynamic analysis of Euler-Bernoulli beams</i>
16:40 – 17:30	Refreshments – Discussions

Friday 25 August	Auditorium Leslokaal 3.1 Krijgslaan 281, Building S8, Ghent University
9:30 – 10:00	Registration
10:00 – 10:45	Nikos Yannakakis: <i>Cordes condition, Campanato nearness and beyond</i>

11:00 – 11:45	Patrizia Pucci: <i>A detour on Sobolev inequalities in the Heisenberg group and applications to critical subelliptic problems</i>
12:00 – 14:00	Lunch Break
14:00 – 14:45	Patrizia Pucci: <i>A detour on Sobolev inequalities in the Heisenberg group and applications to critical subelliptic problems</i>
15:00 – 15:45	Sylvie Monniaux: <i>Maximal regularity as a tool for partial differential equations</i>
	Short Talks
16:10 – 16:20	Julio Delgado: <i>$S(m,g)$ calculus and applications to the analysis of PDEs</i>
16:30 – 16:40	Aidyn Kassymov: <i>Stein-Weiss-Adams inequality on Morrey spaces</i>
16:40 – 17:30	Refreshments – Discussions

Saturday 26 August	Auditorium Leslokaal 3.1 Krijgslaan 281, Building S8, Ghent University
9:30 – 10:00	Registration
10:00 – 10:45	Patrizia Pucci: <i>A detour on Sobolev inequalities in the Heisenberg group and applications to critical subelliptic problems</i>
11:00 – 11:45	Sylvie Monniaux: <i>Maximal regularity as a tool for partial differential equations</i>
12:00 – 14:00	Lunch Break
14:00 – 14:45	Sylvie Monniaux: <i>Maximal regularity as a tool for partial differential equations</i>
15:00 – 15:45	Discussions
15:45 – 16:15	Refreshments
16:15 – 17:00	Discussions

Sunday 27 August	FREE DAY
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Monday 28 August	Auditorium Leslokaal 3.1 Krijgslaan 281, Building S8, Ghent University
9:30 – 10:00	Exhibition and talk “Women in Mathematics” by Prof Sylvie Paycha
10:00 – 10:45	Paula Cerejeiras: <i>Introduction to hypercomplex analysis</i>
11:00 – 11:45	Paula Cerejeiras: <i>Introduction to hypercomplex analysis</i>
12:00 – 14:00	Lunch Break
14:00 – 14:45	Sylvie Paycha: <i>The Wodzicki residue in various disguises</i>

15:00 – 15:45	Sylvie Paycha: <i>The Wodzicki residue in various disguises</i>
15:45 – 16:15	Refreshments
16:15 – 17:00	Public lecture Uwe Kähler: <i>"Can we divide vectors? Geometric calculus in Science and Engineering"</i>

Tuesday 29 August	Auditorium Leslokaal 3.1 Krijgslaan 281, Building S8, Ghent University
9:30 – 10:00	Registration
10:00 – 10:45	Sylvie Paycha: TBA
11:00 – 11:45	Uwe Kähler: <i>Applications of hypercomplex analysis in the theory of reproducing kernel spaces and White noise analysis</i>
12:00 – 14:00	Lunch Break
14:00 – 14:45	Boguslaw Zegarlinski: <i>Perturbation of Dirichlet forms</i>
15:00 – 15:45	Boguslaw Zegarlinski: <i>Perturbation of Dirichlet forms</i>
15:45 – 16:15	Refreshments
16:15 – 17:00	Manuel Del Pino: <i>Dynamics of concentrated vorticities in 2 and 3 dimensional Euler flows</i>

Wednesday 30 August	Auditorium Leslokaal 3.1 Krijgslaan 281, Building S8, Ghent University
9:30 – 10:00	Registration
10:00 – 10:45	Boguslaw Zegarlinski: <i>Perturbation of Dirichlet forms</i>
11:00 – 11:45	Manuel Del Pino: <i>Dynamics of concentrated vorticities in 2 and 3 dimensional Euler flows</i>
12:00 – 14:00	Lunch Break
14:00 – 14:45	Manuel Del Pino: <i>Dynamics of concentrated vorticities in 2 and 3 dimensional Euler flows</i>
15:00 – 15:45	Paula Carejeiras: <i>Introduction to hypercomplex analysis</i>
15:45 – 16:15	Refreshments
16:15 – 17:00	Uwe Kähler: <i>Applications of hypercomplex analysis in the theory of reproducing kernel spaces and White noise analysis</i>

Thursday 31 August	Auditorium Leslokaal 3.1 Krijgslaan 281, Building S8, Ghent University
10:00 – 10:45	Panayotis Smyrnelis: <i>Elliptic systems of phase transition type</i>

11:00 – 11:45	Panayotis Smyrnelis: <i>Elliptic systems of phase transition type</i>
12:00 – 14:00	Lunch Break
14:00 – 14:45	Martin Dindos: <i>Boundary value problems for elliptic operators satisfying Carleson condition</i>
15:00 – 15:45	Martin Dindos: <i>Boundary value problems for elliptic operators satisfying Carleson condition</i>
15:45 – 16:15	Refreshments
16:15 – 17:00	Gerassimos Barbatis: <i>Geometric Hardy inequalities</i>

Friday 1 September	Auditorium Leslokaal 3.1
10:00 – 10:45	Gerassimos Barbatis: <i>Geometric Hardy inequalities</i>
11:00 – 11:45	Gerassimos Barbatis: <i>Geometric Hardy inequalities</i>
12:00 – 14:00	Lunch Break
14:00 – 14:45	Martin Dindos: <i>Boundary value problems for elliptic operators satisfying Carleson condition</i>
15:00 – 15:45	Valentina Casarino: <i>Some harmonic analysis in a general Gaussian setting</i>
15:45 – 16:15	Refreshments
16:15 – 17:00	Paolo Ciatti: <i>Introduction to the restriction theory of the Fourier transform</i>

Saturday 2 September	Auditorium Leslokaal 3.1
10:00 – 10:45	Panayotis Smyrnelis: <i>Elliptic systems of phase transition type</i>
11:00 – 11:45	Valentina Casarino: <i>Some harmonic analysis in a general Gaussian setting</i>
12:00 – 14:00	Lunch Break
14:00 – 14:45	Valentina Casarino: <i>Some harmonic analysis in a general Gaussian setting</i>
15:00 – 15:45	Paolo Ciatti: <i>Introduction to the restriction theory of the Fourier transform</i>
15:45 – 16:15	Refreshments
16:15 – 17:00	Paolo Ciatti: <i>Introduction to the restriction theory of the Fourier transform</i>
17:00 – 17:20	Closing