



Semigroups of Operators: Theory and Applications

Conference Schedule

Kazimierz, Poland, September 30— October 5, 2018

Conference schedule

Sunday, September 30

14⁰⁰ Check in and registration

18⁰⁰ Dinner

Monday, October 1

7⁴⁵ Breakfast

8⁵⁵ Conference opening

9⁰⁰ Plenary talk: Charles Batty

10⁰⁰ Coffee break

10²⁰ Morning sessions

	Y. Tomilov		J. Banasiak and A. Bobrowski
10 ²⁰ –10 ⁴⁵	David Seifert	10 ²⁰ –10 ⁴⁵	Wilson Lamb
10 ⁵⁰ –11 ¹⁵	Jan Rozendaal	10 ⁵⁰ –11 ¹⁵	Lyndsay Kerr
11 ²⁰ –11 ⁴⁵	Lassi Paunonen	11 ²⁰ –11 ⁴⁵	Luke Joel
11 ⁵⁰ –12 ¹⁵	Filippo Dell’Oro	11 ⁵⁰ –12 ¹⁵	Mustapha Mokhtar-Kharroubi
12 ²⁰ –12 ⁴⁵	Jochen Glück	12 ²⁰ –12 ⁴⁵	Roksana Brodnicka
12 ⁵⁰ –13 ¹⁵	Luciano Abadias	12 ⁵⁰ –13 ¹⁵	Quentin Richard

13³⁰ Lunch

15⁰⁰ Afternoon sessions (part 1):

	Y. Tomilov		J. Voigt
15 ⁰⁰ –15 ²⁵	Logan Hart	15 ⁰⁰ –15 ²⁵	Marjeta Kramar-Fijavž
15 ³⁰ –15 ⁵⁵	Marcin Moszyński	15 ³⁰ –15 ⁵⁵	Damir Kinzebulatov

16⁰⁰ Coffee break

16³⁰ Afternoon sessions (part 2):

	A. Bobrowski		J. Voigt
16 ³⁰ –16 ⁵⁵	Jerzy Zabczyk	16 ³⁰ –16 ⁵⁵	Christian Budde
17 ⁰⁰ –17 ²⁵	Wojciech Kryszewski	17 ⁰⁰ –17 ²⁵	Abed Boulouz
17 ³⁰ –17 ⁵⁵	Grzegorz Łukaszewicz	17 ³⁰ –17 ⁵⁵	Sascha Trostorff

18³⁰ Dinner (barbecue)

Tuesday, October 2

7⁴⁵ Breakfast

9⁰⁰ Plenary talk: Jan Kisiński

10⁰⁰ Plenary talk: Jerry Goldstein

11⁰⁰ Coffee break

11³⁰ Morning sessions

G. Sviridyuk		D. Mugnolo and M. Kramar–Fijavž	
11 ³⁰ –12 ⁰⁵	Georgy Sviridyuk	11 ³⁰ –11 ⁵⁵	Serge Nicaise
12 ¹⁰ –12 ³⁰	Alyona Zamyshlyeva	12 ⁰⁰ –12 ²⁵	Amru Hussein
12 ³⁵ –12 ⁵⁵	Alevtina Keller	12 ³⁰ –12 ⁵⁵	Talk cancelled

13¹⁵ Lunch

14³⁰ Afternoon sessions (part 1):

G. Sviridyuk		D. Mugnolo and M. Kramar–Fijavž	
14 ³⁰ –14 ⁵⁵	Natalia Manakova	14 ³⁰ –14 ⁵⁵	Federica Gregorio
15 ⁰⁰ –15 ²⁵	Evgeniy Bychkov	15 ⁰⁰ –15 ²⁵	Christian Seifert
15 ³⁰ –15 ⁵⁵	Natalya Solovyova	15 ³⁰ –15 ⁵⁵	James Kennedy

16⁰⁰ Coffee break

16³⁰ Afternoon sessions (part 2):

A. Bobrowski		J. Voigt	
16 ³⁰ –16 ⁵⁵	Abdelaziz Rhandi	16 ³⁰ –16 ⁵⁵	Mustapha Mokhtar-Kharroubi
17 ⁰⁰ –17 ²⁵	Michael Kaplin	17 ⁰⁰ –17 ²⁵	Sergey Piskarev
17 ³⁰ –17 ⁵⁵	Jacek Polewczak	17 ³⁰ –17 ⁵⁵	Jan Meichsner

18¹⁵ Dinner

Wednesday, October 3

7¹⁵ Breakfast

8¹⁵ Tour to Kozlowka Palace, 10¹⁵ Guided tour in Kazimierz

14⁰⁰ Lunch

15⁰⁰ Afternoon sessions (part 1):

A. Bobrowski		M. Lachowicz and M. Rosini	
15 ⁰⁰ –15 ²⁵	Gisèle Goldstein	15 ⁰⁰ –15 ²⁵	Jurij Kozicki
15 ³⁰ –15 ⁵⁵	Tim Binz	15 ³⁰ –15 ⁵⁵	Waldemar Cieślak

16⁰⁰ Coffee break

16³⁰ Afternoon sessions (part 2):

J. Banasiak and A. Bobrowski		M. Lachowicz and M. Rosini	
16 ³⁰ –16 ⁵⁵	Andrzej KomisarSKI	16 ³⁰ –16 ⁵⁵	Viktor Gerasimenko
17 ⁰⁰ –17 ²⁵	Bogdan Kaźmierczak	17 ⁰⁰ –17 ²⁵	Henryk Leszczyński
17 ³⁰ –17 ⁵⁵	Tomasz Lipniacki	17 ³⁰ –17 ⁵⁵	Massimiliano Rosini

18³⁰ Dinner

Thursday, October 4

7⁴⁵ Breakfast

9⁰⁰ Plenary talk: Thomas G. Kurtz

10⁰⁰ Coffee break

10³⁰ Morning sessions

K. Bogdan		A. Rhandi	
10 ³⁰ –10 ⁵⁵	Agnieszka Kałamajska	10 ³⁰ –10 ⁵⁵	Wolfgang Ruess
11 ⁰⁰ –11 ²⁵	Artur Rutkowski	11 ⁰⁰ –11 ²⁵	Luca Lorenzi
11 ³⁰ –11 ⁵⁵	Victoria Knopova	11 ³⁰ –11 ⁵⁵	Luciana Angiuli
12 ⁰⁰ –12 ²⁵	Tomasz Jakubowski	12 ⁰⁰ –12 ²⁵	Monika Wrzosek
12 ³⁰ –12 ⁵⁵	Yana Butko	12 ³⁰ –12 ⁵⁵	Delio Mugnolo

13⁰⁰ Group photo

13³⁰ Lunch

14³⁰ Afternoon sessions (part 1):

K. Bogdan		A. Rhandi	
14 ³⁰ –14 ⁵⁵	Krzysztof Bogdan	14 ³⁰ –14 ⁵⁵	Talk cancelled
15 ⁰⁰ –15 ²⁵	Lukasz Leżaj	15 ⁰⁰ –15 ²⁵	Chiara Spina
15 ³⁰ –15 ⁵⁵	Karol Szczypkowski	15 ³⁰ –15 ⁵⁵	Cristian Tacelli

16⁰⁰ Coffee break

16³⁰ Afternoon sessions (part 2):

A. Bobrowski		R. Rudnicki	
16 ³⁰ –16 ⁵⁵	Stanisław Kwapien	16 ³⁰ –16 ⁵⁵	Aleksandra Puchalska
17 ⁰⁰ –17 ²⁵	Wha-Suck Lee	17 ⁰⁰ –17 ²⁵	Henrik Kreidler
17 ³⁰ –17 ⁵⁵	Ami Viselter	17 ³⁰ –17 ⁵⁵	Paweł Klimasara

18³⁰ Concert of Chamber Music

19³⁰ Conference Dinner

Friday, October 5

7⁴⁵ Breakfast

9⁰⁰ Plenary talk: Roberto Triggiani

10⁰⁰ Coffee break

10³⁰ Morning sessions

J. Voigt		R. Rudnicki	
10 ³⁰ –10 ⁵⁵	Hendrik Vogt	10 ³⁰ –10 ⁵⁵	Marta Tyran-Kamińska
11 ⁰⁰ –11 ²⁵	Josef Kreulich	11 ⁰⁰ –11 ²⁵	Radosław Wieczorek
11 ³⁰ –11 ⁵⁵	Markus Kunze	11 ³⁰ –11 ⁵⁵	Andrzej Tomski
12 ⁰⁰ –12 ²⁵	Christian Seifert	12 ⁰⁰ –12 ²⁵	Adam Gregosiewicz
12 ³⁰ –12 ⁵⁵	Jürgen Voigt	12 ³⁰ –12 ⁵⁵	Ryszard Rudnicki

13⁰⁰ Conference closing

13¹⁵ Farewell lunch

14⁰⁰ – 15⁰⁰ Buses to Warsaw.

Sessions

Plenary talks

1. Charles Batty, Functional calculus for analytic Besov functions.
2. Jerry Goldstein, The Agmon-Douglis-Nirenberg Problem for Dynamic Boundary Conditions.
3. Jan Kisyński, Petrovsky condition for forward evolution and semigroups.
4. Thomas G. Kurtz, Generators, martingale problems, and stochastic equations.
5. Roberto Triggiani, A third order (in time) PDE: a view from the boundary, to control and to observe.

1. Nonlocal operators (K. Bogdan)

1. Krzysztof Bogdan, Heat kernel of isotropic nonlocal operators.
2. Yana Butko (Kinderknecht), Chernoff approximation of evolution semigroups and beyond.
3. Tomasz Jakubowski, Critical negative Schrödinger perturbations of fractional Laplacian.
4. Agnieszka Kałamańska, Dirichlet's problem for critical Hamilton-Jacobi fractional equation.
5. Victoria Knopova, Long-time behaviour of some Markov processes.
6. Łukasz Leżaj, Heat kernels for subordinators.
7. Artur Rutkowski, The Dirichlet problem for nonlocal Lévy-type operators.
8. Karol Szczyrkowski, Fundamental solution for super-critical non-symmetric Lévy-type operators.

2. Evolution equations of biosciences and bioengineering (J. Banasiak, A. Bobrowski)

1. Roksana Brodnicka, Asymptotic stability of an evolutionary nonlinear Boltzmann-type equations.
2. Luke Joel, The Discrete Unbounded Coagulation-Fragmentation Equation with Growth, Decay and Sedimentation.

3. Bogdan Kaźmierczak, Existence of solutions in a model of bone pattern formation.
4. Lyndsay Kerr, Discrete Coagulation-Fragmentation System.
5. Andrzej KomisarSKI, On a model of the ideal heat exchanger and its relation to the telegrapher's equations.
6. Wilson Lamb, Discrete Fragmentation Equations.
7. Tomasz Lipniacki, From traveling and standing fronts on the curved surfaces to pattern formation.
8. Mustapha Mokhtar-Kharroubi, Existence of invariant densities for conservative linear kinetic equations on the torus without spectral gaps.
9. Quentin Richard, Time asymptotics of structured populations with diffusion.

3. Multiscale Approaches and the Semigroup Environments (M. Lachowicz, M. D. Rosini)

1. Waldemar Cieślak, The Fuss formulas in the Poncelet porism.
2. Viktor Gerasimenko, On Semigroups of Operators Describing Processes of Creation and Propagation of Quantum Correlations.
3. Jurij Kozicki, Infinite populations of interacting entities as complex systems: multi-scale Markov dynamics.
4. Henryk Leszczyński, Self-organization with small range interactions: Creation of bipolarity.
5. Massimiliano D. Rosini, On the micro-to-macro limit for 1D scalar conservation laws.

4. Semigroups on networks and further ramified structures (D. Mugnolo, M. Kramar-Fijavž)

1. Federica Gregorio, Bi-Laplacians on graphs and networks.
2. Amru Hussein, Non-self-adjoint graphs.
3. James Kennedy, Hot spots of quantum graphs.
4. Serge Nicaise, Dispersive effects for the Schrödinger equation on graphs.
5. Christian Seifert, The linearized KdV equation on metric graphs.

5. Semigroups for parabolic problems (A. Rhandi)

1. Luciana Angiuli, On systems of parabolic equations with unbounded coefficients (Part II).
2. Luca Lorenzi, On systems of parabolic equations with unbounded coefficients (Part I).
3. Delio Mugnolo, Comparison principles for parabolic equations and applications to PDEs on networks.
4. Wolfgang Ruesch, Regularity of solutions to partial differential delay equations.
5. Chiara Spina, Rellich and Calderón-Zygmund inequalities for operators with discontinuous and singular coefficients.
6. Cristian Tacelli, Elliptic operators with unbounded diffusion, drift and potential terms.
7. Monika Wrzosek, Newton's method for the McKendrick equation.

6. Stochastic semigroups and their applications in biology (R. Rudnicki)

1. Adam Gregosiewicz, Asymptotics of the Lebowitz–Rubinow–Rotenberg model of cell populations development.
2. Paweł Klimasara, A model for random fire induced tree-grass coexistence in savannas.
3. Henrik Kreidler, Weighted Koopman semigroups and their applications.
4. Aleksandra Puchalska, The graph structure impact on a singular limit of the generalized network transport.
5. Ryszard Rudnicki, Stochastic semigroups and their applications to Stein's neural model.
6. Andrzej Tomski, Semigroups in biophysics: stochastic Liouville equation.
7. Marta Tyran-Kamińska, Substochastic semigroups and positive perturbations of boundary conditions.
8. Radosław Wieczorek, Clustering in a model of yeast cell cycle.

7. Quantitative aspects of semigroup asymptotics (Y. Tomilov)

1. Luciano Abadias, Mean ergodic theorems and domains of higher degree functions of Cesàro bounded operators.
2. Filippo Dell’Oro, Decay properties of dissipative systems of linear thermoelasticity and viscoelasticity.
3. Jochen Glück, Convergence of Positive Semigroups and Hyper-Bounded Operators.
4. Logan Hart, Superstability of Semigroups.
5. Marcin Moszyński, Uni-asymptotic linear systems.
6. Lassi Paunonen, Nonuniform Stability Properties of Coupled Systems.
7. Jan Rozendaal, Sharp growth rates for semigroups using resolvent bounds.
8. David Seifert, Optimal rates of decay for semigroups on Hilbert spaces.

8. Perturbation and Approximation (J. Voigt)

1. Abed Boulouz, On norm continuity, differentiability and compactness of perturbed semigroups.
2. Christian Budde, Extrapolation spaces and Desch-Schappacher perturbations of bi-continuous semigroups.
3. Marjeta Kramar-Fijavž, On perturbing the domain of certain generators.
4. Damir Kinzebulatov, A new approach to the L^p theory of $-\Delta + b \cdot \nabla$ and its application to Feller processes with general drifts.
5. Josef Kreulich, On compactifications of bounded C_0 -semigroups.
6. Markus Kunze, Diffusion with nonlocal Dirichlet boundary conditions on unbounded domains.
7. Jan Meichsner, On the Harmonic Extension Approach to Fractional Powers of Linear Operators.
8. Mustapha Mokhtar-Kharroubi, Relative operator bounds for positive operators in ordered Banach spaces and related topics.
9. Sergey Piskarev, Approximation of fractional differential equations in Banach spaces.

10. Christian Seifert, Perturbations of positive semigroups with applications to Dirichlet forms perturbed by jump parts.
11. Sascha Trostorff, Strongly continuous semigroups associated with evolutionary equations.
12. Hendrik Vogt, Perturbation theory for accretive operators in L_p .
13. Jürgen Voigt, On "monotone" convergence of sectorial forms.

9. Varia (A. Bobrowski)

1. Tim Binz, Operators with Wentzell boundary conditions and the Dirichlet-to-Neumann operator.
2. Gisèle Goldstein, New Results on Instantaneous Blowup in \mathbb{H}^N .
3. Michael Kaplin, Relatively uniformly continuous semigroups on vector lattices.
4. Wojciech Kryszewski, Bifurcation at infinity for elliptic problems on \mathbb{R}^N .
5. Stanisław Kwapien, Continuity and boundness of stochastic convolutions.
6. Wha-Suck Lee, Implicit Fokker-Planck Equations: Non-commutative Convolution of Probability Distributions.
7. Grzegorz Łukaszewicz, Nonlinear semigroups in hydrodynamics and their perturbations. Micropolar meets Newtonian.
8. Jacek Polewczak, Hard-spheres linear kinetic theories.
9. Abdelaziz Rhandi, Weighted Hardy's inequalities and Kolmogorov-type operators.
10. Ami Viselter, Convolution semigroups on quantum groups and non-commutative Dirichlet forms.
11. Jerzy Zabczyk, Markovian models of short rates.

10. Sobolev type equations. Degenerate operator semigroups and propagators (G. Sviridyuk)

1. Evgeniy Bychkov, Semilinear Sobolev Type Equations of Higher Order.
2. Georgy Sviridyuk, Sobolev type equations. Degenerate semigroups of operators and degenerate propagators.

3. Alevtina Keller, Algorithms for the Numerical Solution of Optimal Control Problems for Models of the Leontief Type.
4. Natalia Manakova, Optimal Control Problem for the Sobolev Type Equations.
5. Natalya Solovyova, Nonclassical conditions for linear Sobolev Type Equations.
6. Alyona Zamyshlyeva, Sobolev type equations of higher order. Theory and applications.