## CONFERENCE PROGRAMME

# Monday, September 15th

- 10.30-11.15 Opening.
- 11.15-12.00 A memory of Alfredo Lorenzi (by A. Favini, L. De Michele, G.Talenti).
- 12.00-12.30 J. Prüss: Maxwell-Stefan diffusion in reactive multicomponent flows.
- 12.35-13.05 A. Miranville: Asymptotic behavior of variants of Cahn-Hilliard equation.
- 13.10-14.40 Lunch.
- 14.40-15.10 G. Ruiz Goldstein: The PDEs of Mathematical Finance.
- 15.15-15.45 V. Isakov: On increasing stability for sources and coefficients from boundary data at larger frequencies.
- 15.50-16.20 D. Guidetti: Linear and quasilinear parabolic problems with dynamic boundary conditions.
- 16.25-16.50 Coffee break.
- 16.50-17.20 O. Arena: On some boundary control problems.
- 17.25-17.55 C. Lefter: Stabilization of systems of parabolic equations.
- 18.00-18.30 S. Romanelli: Nonsymmetric elliptic operators with Wentzell-type boundary conditions.
- 18.35-19.05 D. Addona: A class of semi-linear backward parabolic Cauchy problems.

### Tuesday, September 16th

- 9.00-9.30 C. Pagani: A nonlinear Steklov problem arising in corrosion modeling.
- 9.35-10.05 M. Fabrizio: Fractional models for thermo-meccanical systems.
- 10.10-10.40 B. Ruf: On an inequality by Brezis-Merle and the 1-biharmonic operator.
- 10.45-11.15 Coffee break.
- 11.15-11.45 G. Metafune: Scale invariant elliptic operators with singular coefficients.
- 11.50-12.20 L. Pandolfi: Cosine operator and controllability of the heat equation with memory.
- 12.25-12.55 M. Calanchi: On Trudinger-Moser type inequalities with logarithmic weights.
- 13.00-14.30 Lunch.
- 14.30-15.00 M. Yamamoto: Inverse problems for the Kelvin-Vogt model.
- 15.05-15.35 G. Kurina: Inverse problem of variational calculus for discretetime systems.
- 15.40-16.10 F. Colombo: Some identification problems for kernels depending on time and on a space variable.
- 16.15-16.40 Coffee break.
- 16.40-17.10 F. Bucci: Optimal boundary control of coupled hyperbolic-parabolic PDE systems: distinct physical models, diverse mathematical analyses.
- 17.15-17.45 P. Loreti: Observability estimates for membranes in a square.
- 17.50-18.20 D. Sforza: Reachability for integro-differential equations.
- 18.25-18.55 M. Plekhanova: Control problems for degenerate evolution equations in Banach spaces.

### Wednesday, September 17th

- **9.00-9.30 J. Janno:** Inverse problem for semilinear fractional parabolic equation with integral over-determination.
- 9.35-10.05 N. Okazawa: Identification problem for an elliptic problem in Hilbert space new observation.
- 10.10-10.40 V. Fedorov: Fractional order degenerate evolution equations in Banach spaces.
- 10.45-11.15 Coffee break.
- 11.15-11.45 G. Marinoschi: Existence for a nonlinear diffusion problem with a singular diffusivity.
- 11.50-12.20 V. Vespri: Pointwise estimates for a class of degenerate/singular parabolic equations.
- 12.25-12.55 M. Choulli: Heat trace asymptotic and compactness of isospectral potentials for the Dirichlet Laplacian.
- 13.00-14.30 Lunch.
- 14.30-15.00 P. Cannarsa: Inverse problems for parabolic operators of Grushin type.
- 15.05-15.35 L. Rondi: High frequency asymptotics for direct and inverse scattering problems.
- 15.40-16.10 C. Pignotti: Exponential stability for abstract evolution equations with delay.
- 16.15-16.40 Coffee break.
- 16.40-17.10 G. Coclite: An evolutive optimal harvesting problem with measure valued solutions.
- 17.15-17.45 R. Guglielmi: Model predictive control for the Fokker-Plank equation.
- 17.50-18.20 G. Floridia: Global approximate controllability for a class of semilinear degenerate parabolic equations.

### Thursday, September 18th

- 9.00-9.30 F. Alabau: Indirect observation and control of coupled systems.
- **9.35-10.05 V. Barbu:** Self-organized criticality and evolution to equilibrium of nonlinear singular diffusion systems.
- 10.10-10.40 F. Ancona: Fractional order degenerate evolution equations in Banach spaces.
- 10.45-11.15 Coffee break.
- 11.15-11.45 D. Cassani: Direct and inverse problems related to MEMS.
- 11.50-12.20 G. Mola: On the identification of the diffusion coeffcient in a linear evolution equation in Hilbert spaces: a semigroup-theoretical approach.
- 12.25-12.55 F. Messina: Unique continuation and continuous dependence for a severely ill-posed integro-differential parabolic problem.
- 13.00-14.30 Lunch.
- 14.30-15.00 A. Lunardi: Maximal  $L^2$  regularity for Kolmogorov equations in infinite dimensions.
- 15.05-15.35 A. Rhandi: Schrödinger type operators with unbounded diffusion and potential terms.
- 15.40-16.10 D. Pallara: Fractional operators: perimeters and related semilinear equations.
- 16.15-16.40 Coffee break.
- 16.40-17.10 A.L. Skubachevskii: Solvability of nonlocal problems for Vlasov-Poisson equations.
- 17.15-17.45 O. Solonukha: On some nonlinear elliptic functional differential equations.
- 17.50-18.20 I. Melnikova: New approaches to abstract stochastic problems.

# Friday, September 19th

- 9.00-9.30 I. Vrabie: Nonlinear delay evolution inclusions with general nonlocal implicit initial conditions.
- **9.35-10.05 V. Romanov:** On the determination of the coefficients in viscoelasticity equations.
- 10.10-10.40 D. Mugnai: Carleman estimates for degenerate non smooth parabolic problems.
- 10.45-11.15 Coffee break.
- 11.15-11.45 Y. Yakubov: Abstract Regge boundary value problem: maximal  $L_p$ -regularity and asymptotic behavior of eigenvalues.
- 11.50-12.20 A. Yagi: Convergence of solutions to a model for growing crystal surfaces in non smooth domains.

12.25-12.40 Closing.