

Schedule: Mini Workshop *Zero-Range and Point-Like Singular Perturbations: For a Spillover to Analysis, PDE and Differential Geometry*

Monday

9:30-9:50 CEST	Opening
9:50 - 10:40 CEST	Luca Fanelli: About Schrodinger and Dirac operator with scaling critical potential
10:50 - 11:40 CEST	Jens Wirth: Laplace and sub-Laplace operators on homogeneous groups and non-commutative Fourier transforms
15:10 - 16:00 CEST	Riccardo Adami: Two-dimensional systems with nonlinear point interactions
16:20 - 17:10 CEST	Filippo Boni: NLS ground states with singularities

Tuesday

9:30-10:20 CEST	Ugo Boscain: Geometric confinement of the curvature Laplacian on almost Riemannian manifolds
10:50 - 11:40 CEST	Ivan Beshastnyi: Self-adjoint extensions for the curvature Laplacian on Grushin manifolds
15:00 - 15:50 CEST	Valentina Franceschi: Pointed sub-Laplacians in three dimensions and Hardy inequalities
16:00 - 16:50 CEST	Matteo Gallone: The Laplace-Beltrami operator on the Grushin Cylinder
17:00 - 18:00 CEST	General Discussion (Part I): state of art, open problems What is the contact interaction, dependence of the codimensions of the interaction variety and scaling limits (moderated by Adami, Georgiev, Michelangeli and Noja)

Wednesday

9:10-10:00 CEST	Diego Noja: The NLS equation with a point interaction in two and three dimensions
10:10- 11:00 CEST	Ivana Vojnovi'c: Generalized solutions to non-linear Schrodinger equations with singularities
11:40- 12:30 CEST	Marilena Ligabo': Boundary conditions, product formulae and classical limit

Thursday

9:10-10:50 CEST	General Discussion (Part II): state of art, open problems (based on ideas and moderated by Ugo Boscain and Ivan Beshastnyi)
11:10 -12:00 CEST	Mario Rastrelli : On the squared Laplacian perturbed with singular potential
15:30-16:20	Raffaele Scandone: NLS WITH POINT INTERACTIONS: RESULTS AND PERSPECTIVES s
16:30 – 17:30	General Discussion (Part III): state of art, open problem (based on ideas and moderated by Raffaele Scandone, Luca Fanelli and Vladimir Georgiev)

Friday

9:30-11:30 CEST	General Discussion (Part IV): state of art, open problems
11:30 CEST	Closure

