	Wednesday, 27th June	Thursday, 28th June	Friday, 29th June
9:00 – 9:45	Semiclassical computational methods for quantum dynamics with band crossing and uncertainty **Shi Jin** University of Wisconsin–Madison, USA Shanghai Jiao Tong University, China	Using sparse grid and tensor methods to compute vibrational spectra of molecules **Tucker Carrington** Chemistry Department, Queen's University, Kingston, Canada	Quantum dynamics methods: from grids to gaussian wavepackets **Graham Worth** Department of Chemistry, University College London, U.K.
9:45 – 10:30	Low regularity Fourier integrators for nonlinear Schrödinger equations **Alexander Ostermann** University of Innsbruck, Austria	Numerical methods that conserve or dissipate energy on Riemannian manifolds **Brynjulf Owren** Norwegian University of Science and Technology (NTNU), Trondheim, Norway	What happens if the potential is complex-valued? **Caroline Lasser** Technical University of Münich, Germany
10:30 – 11:00	Coffee break	Coffee break	Coffee break
11:00 – 11:30	On quantum perturbation theory and time averaging **Fernando Casas** Jaume I University, Castellón, Spain	Conservation of energy for various systems of conservation laws. Around Onsager's conjecture. **Agnieszka Świerczewska-Gwiazda** University of Warsaw, Poland	Compact splitting methods for Schrödinger equation and their consequences **Karolina Kropielnicka** University of Gdańsk, Poland
11:30 – 12:00	Sharp local error estimation for time-reversible one-step schemes **Winfried Auzinger** Technische Universität Wien, Austria	Energy preserving methods for nonlinear Schrödinger equations **Christophe Besse** University of Tolouse, France	Measure valued – strong uniqueness **Piotr Gwiazda** Polish Academy of Sciences, Warsaw, Poland
12:00 – 12:15	Break	Break	Break
12:15 – 12:45	Non-relativistic limit of the nonlinear Dirac equation and its numerical methods **Yongyong Cai** Beijing Computational Science Research Center, China	Dynamics of the rotational predissociation of LiH **Józef E. Sienkiewicz** Gdańsk University of Technology, Poland	Deep learning as optimal control problems **Elena Celledoni** Norwegian University of Science and Technology (NTNU), Trondheim, Norway
12:45 – 13:15	Modelling, analysis and simulation for degenerate dipolar quantum gas **Weizhu Bao** Department of Mathematics, National University of Singapore	Rovibrational predissociation dynamics: spectrum and population decay of selected vibrational levels of the KLi molecule **Jan Kozicki** Gdańsk University of Technology, Poland	Geometric numerical integration of differential equations **Reinout Quispel** La Trobe University, Melbourne, Australia
13:15 – 14:30	Lunch	Lunch	13:30 – 14:45 Lunch
14:30 – 15:00	Accelerated gradient methods for computing the stationary states of Gross–Pitaevskii Equations **Xavier Antoine** University of Nancy, France	Convergence analysis of commutator-free quasi-Magnus exponential integrators for non-autonomous linear Schrödinger equations **Mechthild Thalhammer** University of Innsbruck, Austria	
15:00 – 15:30	Computing ground states of spin 2 Bose–Einstein condensates by the normalized gradient flow **Qinglin Tang** Sichuan University, China	Exponential propagators for the Schrödinger equation with a time-dependent potential **Sergio Blanes** Polytechnic University of Valencia, Spain	
15:30 – 16:00	Coffee break	Coffee break	
16:00 – 16:30	**Elevator Pitch** Chunmei Su, Tobias Jawecki, Gulcin M. Muslu, Nikita Kopylov, Agata Gołaszewska, Patryk Jasik, Marek Krośnicki, Emilia Przybysz, Tucker Carrington	The Schrödinger method for the Vlasov–Poisson equation in cosmology **Norbert Mauser** Wolfgang Pauli Institute, Vienna, Austria	
16:30 – 17:00		Schrödinger equation with time-varying potential: many problems, many approaches **Pranav Singh** University of Oxford, U.K.	
17:30 – 18:00	**Poster Session** & **Wine Reception**		

Trip to Historic Gdańsk City Centre

45 min

30 min

19:00
Workshop Dinner
Tawerna Orłowska
Orłowska 3, 81-522 Gdynia, Poland

map
bit.ly/2JDpRJD