

# NEW IDEAS ABOUT DYNAMICS AND MECHANISMS OF ENERGY RELAXATION AND TRANSPORT

Closing event - ERC Starting Grant QUENTRHEL

February 8-9, 2018

Aula H, Department of Chemical Sciences, Via Marzolo 1, Padova

## PROGRAM

### Thursday 08/02

- 13:45-14:00 Welcome & opening
- 14:00-14:25 **The role of charge transfer states in the primary processes of photosynthesis**  
Rienk van Grondelle, Vrije Universiteit Amsterdam
- 14:25-14:50 **Transport through chiral molecules**  
Yossi Paltiel, Hebrew University of Jerusalem
- 14:50-15:15 **Ultrafast coherent electronic and nuclear dynamics induced by attopulses**  
Francoise Remacle, Université de Liège
- 15:15-15:40 **Isotope effect as a manifestation of longer time vibronic coherence**  
Raphael Levine, Hebrew University of Jerusalem, Fritz Haber Research Center for Molecular Dynamics
- 15:40-16:05 **Dynamics at conical intersections and its possible spectroscopic characterization**  
Maxim Gelin, Technical University of Munich
- 16:05-16:30 Coffee break
- 16:30-16:55 **Coherent coupling in the photosynthetic FMO complex**  
Margherita Maiuri, Politecnico di Milano
- 16:55-17:20 **On the chirality of porphyrin nanoassemblies**  
Luigi Monsù Scolaro, Università degli Studi di Messina
- 17:20-17:35 **Simulating optical processes in molecules by ab initio based multiscale models**  
Stefano Corni, Università degli Studi di Padova
- 17:35-17:50 **Energy transfer in chromophoric networks: application to probabilistic computing**  
Barbara Fresch, Università degli Studi di Padova
- 17:50-18:05 **Quentrhel mix - vol. 1**  
Luca Bolzonello, Università degli Studi di Padova
- 18:40-19:40 Guided tour of Bo Palace
- 20:00 Social dinner @ Ristorante Isola di Caprera

### Friday 09/02

- 09:00-09:25 **Transient absorption spectroscopy and photon statistics of single molecular complexes**  
Niek van Hulst, Barcelona Institute of Science and Technology
- 09:25-09:50 **Frequency- and time-resolved photocounting statistics of a prototype light-harvesting vibronic dimer**  
Alexandra Olaya-Castro, UCL
- 09:50-10:15 **Vibronic models supporting persistent coherence: new theoretical methods and connections to actual experiments**  
Susana Huelga, Universität Ulm
- 10:15-10:40 **Weak interactions and delocalization**  
Tõnu Pullerits, Lunds Universitet
- 10:40-11:05 **Probing spatiotemporal dynamics in all states of matter**  
Tobias Brixner, Julius-Maximilians-Universität Würzburg
- 11:05-11:30 Coffee break
- 11:30-11:55 **The excitonic signature of LH2, from a multiscale quantum chemical description to spectroscopic evidence**  
Lorenzo Cupellini, Università di Pisa
- 11:55-12:20 **2D electronic spectroscopy of lead-halide perovskites**  
Franco Camargo, Politecnico di Milano
- 12:20-12:45 **Synthesis, properties and dynamics of colloidal lead halide perovskite nanocrystals**  
Elisabetta Fanizza, CNR-IPCF Bari, Università degli Studi di Bari
- 12:45-13:15 **Chromophoric systems for quantum coherent electronic energy transfer investigations**  
Mariachiara Trapani, CNR-ISMN Messina
- Synthetic procedures**  
Massimiliano Cordaro, Università degli Studi di Messina
- 13:15-13:30 **Quentrhel mix - vol. 2**  
Andrea Volpato, Università degli Studi di Padova
- 13:30-14:00 Goodbye & light lunch
- 15:00-17:30 **COPAC Meeting**