

# Workshop on Understanding Quantum Phenomena with Path Integrals: From Chemical Systems to Quantum fluids and Solids

ICTP, Trieste (Italy)

3-7 July 2017

## LIST OF POSTERS (Alphabetical Order)

### **Iman Ahmadabadi**

Sharif University of Technology, Tehran, IRA

*Computational and Experimental study on 5-AVA 2D Perovskite Solar Cell Devices*

### **Raul Bombín Escudero**

Universitat Politècnica de Catalunya

*Superfluidity in a System of Polarized Dipolar Bosons*

### **Danilo Calderini**

ETH Zürich, Department of Chemistry and Applied Biosciences, Laboratory of Physical Chemistry

*Analysis and benchmark of Non-Adiabatic Dynamics with NRPM*

### **Alberto Cappellaro**

Physics Department, University of Padova

*Thermal field theory of bosonic gases with finite-range effective interaction*

### **Tommaso Comparin**

Ecole Normale Supérieure, INO-CNR BEC Center and Università di Trento

*Thermodynamics of the unitary Bose gas from First principles*

### **Giovanni Di Liberto**

Università degli Studi di Milano, Dipartimento di Chimica

*A Semiclassical Divide-and-Conquer Method for Spectroscopic Calculations of High Dimensional Molecular Systems*

### **Marisa Dusseault**

Memorial University of St. John's, Faculty of Science, Physics Department

*Quantum and Thermal Effects in the Melting of Simple Solids*

### **Suraj Kannath**

Lodz University of Technology, Faculty of Chemistry

*HYDROGEN ATOM ABSTRACTION FROM ETHANOL BY ATOMIC HYDROGEN IN AQUEOUS SOLUTION*

### **Nikolay Kondratyuk**

Joint Institute for High Temperatures of RAS

*Inclusion of quantum nuclear effects in alkanes using PIMD techniques*

### **Yair Litman**

Fritz Haber Institute, Max Planck Society

*Nuclear Quantum Effects on Surface-Assisted Water Dissociation*

### **Aliezer Martinez Mesa**

University of Havana

*Adsorption of molecular hydrogen on nanostructured surfaces*

### **Luca Parisi**

University of Trento

*Spin dynamics in one-dimensional bosonic quantum gases*

**Ricardo Pérez de Tudela**

Lehrstuhl fuer Theoretische Chemie, Ruhr-Universitaet Bochum

*Nuclear quantum effects on acid dissociation in microsolvation environments*

**Muhammad Nawaz Qaisrani**

International School of Advanced Studies, SISSA

*Protein Fluorescence (A nightmare problem)*

**Luis Alberto Roa Oppliger**

Universidad de Concepción, Facultad de Ciencias Física y Matemáticas, Departamento de Física

*Entanglement generated by a Dicke phase transition*

**Subrahmanyam Sappati**

Indian Institute of Science Education and Research IISER Pune

*Nuclear Quantum Effects in an HIV/Cancer Inhibitor: The Case of Ellipticine*

**Supratik Sarkar**

Indian Institute of Science Education and Research (IISER) - Pune, India

*From Quantum Fluids to Emergent Gravity: Quantum potential induced non-local BEC and Analogue Hawking radiation*

**FATIMA-ZAHRA SIYOURI**

Faculty of Sciences, Mohammed V University of Rabat-Morocco

*Negativity of Wigner Function as Measure of Quantum Correlations*

**Luca Smaldone**

Università degli Studi di Salerno, Dipartimento di Fisica "E.R.Caianello"

*Signatures of inequivalent representations in path integrals*

**Aidan Strathearn**

University of St Andrews School of Physics and Astronomy

*Efficient Simulation of Non-Markovian Open Systems Using Real Time Path Integrals*

**Manish Thapa**

ETH Zurich, Department of Chemistry and Applied Biosciences

*Path Integral Methods to Compute Electron Transfer Reaction Rates*

**Llinersy Uranga Piña**

Departamento de Física Teórica, Facultad de Física, Universidad de la Habana

*Relaxation dynamics in isolated and open many-body quantum systems*

**Luis Vasquez**

Lodz University of Technology

*Nuclear Quantum Effects and Isotope Effects for Vaporation of Dibromomethane*

**Pierre Winter**

San Diego State University, San Diego, USA

*Microcanonical Instanton Rate Theory Applied to Molecular Reactions*