



## Workshop on Fundamentals on Quantum Transport

07/08/2017 - 11/08/2017 Trieste, Italy

**LOCAL ORGANIZER** 

Fazio Rosario The Abdus Salam International Centre for

Theoretical Physics

Condensed Matter and Statistical Physics

Section

Strada Costiera 11 34151 Trieste

**DIRECTORS** 

Altshuler Boris L. Columbia University United States of America

Department of Physics 538 West 120th Street 824 Pupin Hall New York NY 10027

UNITED STATES OF AMERICA

Lerner Igor V. University of Birmingham United Kingdom

School of Physics and Astronomy Edgbaston

Birmingham B15 2TT UNITED KINGDOM

**SPEAKERS** 

Benenti Giuliano Universita' degli Studi dell'Insubria Italy

Dipartimento di Fisica e Matematica

Via Valleggio 11 22100 Como ITALY

Berg Erez The Weizmann Institute of Science

P.O.Box 26 IL-76100 Rehovot ISRAEL

Chalker John Timothy Rudolf Peierls Centre for Theoretical

Physics

Department of Physics University of Oxford 1 Keble Road Oxford OX1 3NP United Kingdom

Israel

Italy

Citro Roberta Department of Physics E.R. Caianiello Italy University of Salerno Via Giovanni Paolo II, 132 Fisciano SA 84084 **ITALY** Flach Sergei Institute for Basic Science IBS Germany Center for Theoretical Physics of Complex Systems PCS Administration Office, 4th Floor Faculty Wing, KAIST Munji Campus 193 Munji-ro, Yuseong-gu Gangardt Dimitri M. University of Birmingham Israel School of Physics and Astronomy Edgbaston BI5 2TT Birmingham **UNITED KINGDOM** Gefen Yuval The Weizmann Institute of Science Israel Department of Condensed Matter Physics 76100 Rehovot **ISRAEL** Gross Christian Max Planck Institut fuer Quantenoptik Germany Hans-Kopfermann-Str. 1 D-85748 Garching **GERMANY** Hafezi Mohammad Joint Quantum Institute United States of America University of Maryland 2207 Computer & Space Sciences Bldg. College Park MD 20742 UNITED STATES OF AMERICA Heidrich Meisner Fabian Ludwig-Maximilians-University Munich Germany Department for Physics LS Prof. Schollwoeck Theresienstrasse 37 80333 Munich **GERMANY** Ioffe Lev B. Laboratoire de physique theorique et United States of America hautes energies, LPTHE UMR7589 4 place Jussieu, Boite 126 T13-14 4eme etage 75005 Paris Levitov Leonid Samuel Massachusetts Institute of Technology Russian Federation Department of Physics 77 Massachusetts Avenue MA 02139-4307 Cambridge UNITED STATES OF AMERICA Loss Daniel Switzerland University of Basel Department of Physics Klingelbergstrasse 82 CH-4056 Basel **SWITZERLAND** Pekola Jukka Aalto University School of Science Finland O.V. Lounasmaa Laboratory P.O. Box 13500 00076 Aalto

**FINLAND** 

Schneider Ulrich Cavendish Laboratory Germany Department of Physics University of Cambridge 19 J J Thomson Avenue Cambridge CB3 0HE UNITED KINGDOM Switzerland Schoenenberger Christian University of Basel Institute of Physics Klingelbergstrasse 82 CH-4056 Basel **SWITZERLAND** Shlyapnikov Georgy Universite XI Paris Sud France LPTMS Laboratoire de Physique Theorique et Modeles Statistiques Batiment 100 15, rue Georges Clemenceau F-91405 Orsay Cedex 05 Taddei Fabio NEST NANO CNR Italy Piazza dei Cavalieri, 7 56126 Pisa **ITALY** Wang Ke Department of Physics People's Republic of China Harvard University 17 Oxford St Cambridge MA 02138 UNITED STATES OF AMERICA **PARTICIPANTS** Abdizadehkalan Sakineh Institute for Advanced Studies in Basic Islamic Republic of Iran Sciences (IASBS) Abdolhosseini Sarsari Ismaeil Isfahan University of Technology Islamic Republic of Iran Department of Physics Isfahan 84156 ISLAMIC REPUBLIC OF IRAN Abedinpour Harzand Saeed Department of Physics, Institute for Islamic Republic of Iran Advanced Studies in Basic Sciences Aboud Ayiman Akdeniz Zehra Piri Reis University Turkey Faculty of Science and Literature Istasyon Cd., Hacioglu Sk., no.3 34940 Tuzla - Istanbul **TURKEY** Russian Federation Aksenov Sergei Theoretical Physics Laboratory, Kirensky Institute of Physics, Federal Research Center KSC Siberian Branch Russian Academy of Sciences

University of Isfahan

Physics Department, HezarJerib.st, 81746-73441 Isfahan

ISLAMIC REPUBLIC OF IRAN

Islamic Republic of Iran

Amini Abchuyeh Mohsen

Anikina Ekaterina South Ural State University (National Russian Federation research university) Institute of Natural and Hard Sciences Physics Faculty Department of Computer Modeling and Nanotechnology Skolkovo Institute of Science and Russian Federation Antonenko Daniil Technology, Center for Quantum Materials Colombia Arcila Forero Julian Universidad Nacional de Colombia, Facultad de Ciencias, Departamento de Fisica Bagolini Luigi SISSA Trieste Bhandari Bibek Scuola Normale Superiore Italy Bid Aveek Department of Physics, Indian Institute India of Science Biloshytskyi Volodymyr Taras Shevchenko National University of Ukraine Faculty of Physics Chair of Quantum Field Theory Academician Glushkov Avenue, 4 Building 1 Bouasria Yousra Universite' Mohammed V Morocco Laboratoire de Physique Theorique Faculte' des Sciences B.P. 1014 Avenue Ibn Battouta 10000 Rabat Universidad Tecnica Federico Santa Chile Bravo Sergio Maria. Physics department. Carusela Maria INSTITUTO DE CIENCIAS, Argentina UNIVERSIDAD NACIONAL DE GENERAL SARMIENTO Chan Amos Rudolf Peierls Centre for Theoretical United Kingdom Physics, University of Oxford College of Physical Science and People's Republic of China Chen Ji-sheng Technology, Central China Normal University Cheraghchi Hossein Damghan University Islamic Republic of Iran Daneshgah Square Cheshme-ali Road 36719-34351 Damghan Semnan ISLAMIC REPUBLIC OF IRAN Chikina Ioulia Commissariat a l'Energie Atomique, France IRAMIS, LIONS, UMR SIS2M 3299 **CEA-CNRS** Chowdhury Debashree Department of Physics, Ben-Gurion Israel University of Negev, Post-Doc Cotlet Ovidiu Quantum Photonics Group, Institute of Switzerland Quantum Electronics, Physics Department ETH Zurich

Da Costa Natalia Utrecht University ITP Brazil The Netherlands Dai Yafei Faculty, School of Physics Science & People's Republic of China Technology, Nanjing Normal University, Dentelski David Bar-Illan university, physics department Israel Dolcetto Giacomo University of Luxembourg Luxembourg Dolgirev Pavel Skoltech Quantum materials Russian Federation Drukier Casper Institute for theoretical physics Germany University of Leipzig **Dutta Paramita** India Condensed Matter Physics Group (Theory), Institute of Physics, Bhubaneswar El Allati Abderrahim University Mohammed I Morocco Faculty of Sciences & Technologies B.P.3, C.P. 32003 Ajdir Al Hoceima **MOROCCO** Farghadan Rouhollah Islamic Republic of Iran university of kashan Faridi Azadeh School of Physics, Institute for Research Islamic Republic of Iran in Fundamental Sciences (IPM) Fazileh Farhad Department of Physics, Isfahan Islamic Republic of Iran University of Technology Fischer Uwe Robert Seoul National University, Dept. of Republic of Korea Physics and Astronomy Franchini Fabio Ruder Boskovic Institute Croatia Max Planck Institute for Mathematics in Frigeri Giovanni Andrea Germany the Sciences Ghorban Zadeh Moghaddam Ali **IASBS** Islamic Republic of Iran Institute for Advanced Studies in Basic Sciences Gavazang 45137-66731 Zanjan Zanjan Universita della Calabria Giuliano Rosa Italy Gonzalez Montoya Francisco Institute of Mathematical Physics, United Kingdom School of Mathematics, Faculty of Science, University of Bristol Gopal Rk Mesoscopic Lab Department of Physical India Sciences Indian Institute of Science Bangalore Gounaris Georgios National and Kapodistrian University of Greece Athens . Poland Grygiel Barbara Institute of Low Temperature and Structure Research, Polish Academy of Sciences in Wroclaw, Division of Theory of Condensed Matter, Department of Theory of Superconductivity and Superfluidity

SISSA Trieste

Italy

Guerci Daniele

Gulden Tobias	Technion - Israel Institute of Technology	Israel
Gundogdu Sinan	Bilkent University Physics Department	Turkey
Hafizi Roohollah	Isfahan University of Technology Department of Physics 84156-83111 Isfahan ISLAMIC REPUBLIC OF IRAN	Islamic Republic of Iran
Hammam Kenza	Universite' Mohammed V Laboratoire de Physique Theorique Faculte' des Sciences B.P. 1014 Avenue Ibn Battouta 10000 Rabat	Morocco
Ho Yew Hung Derek	Centre for Advanced Two Dimensional Materials, National University of Singapore	Singapore
Jafari Seyed Akbar	Physics Department Sharif University of Technology Azadi 11155.91.61 Tehran Tehran ISLAMIC REPUBLIC OF IRAN	Islamic Republic of Iran
Javed Khalid	Department of Physics Forman Christian College Ferozepur Road Lahore 54600 PAKISTAN	Pakistan
Jin Hao	National Center for Nanoscience and Technology Beijing	People's Republic of China
Kagalovsky Victor	Sami Shamoon College of Engineering	Israel
Kamenev Alex	School of Physics and Astronomy University of Minnesota 116 Church Street SE Minneapolis 55455 Minnesota UNITED STATES OF AMERICA	United States of America
Karpov Petr	"National University of Science and Technologies ""MISiS"""	Russian Federation
Kati Yagmur	Center for Theoretical Physics of Complex Systems, Institute for Basic Science (IBS)	Republic of Korea
Kharitonov Maxim	Theoretische Physik IV, Universitaet Wuerzburg	Germany
Kreisel Andreas	Institut fur Theoretische Physik Universitat Leipzig	Germany
Kuiri Manabendra	Indian Institute of Science Bangalore, INDIA Department of Physics Quantum Transport Lab Ph.D advisor: Dr. Anindya Das Assistant Professor Department of Physics Indian Institute of Science Bangalore, INDIA	India
Lunkin Aleksey	Moscow Institute of Physics and Technology	Russian Federation

Lyu Zhiguo	Department of Physics and Astronomy Shanghai Jiao Tong University	People's Republic of China
Mallupura Shrirangaiah Chandrashekara	Department of Studies in Physics, University of Mysore	India
Man Zhongxiao	College of Physics and Engineering, Qufu Normal University	People's Republic of China
Marzolino Ugo	Ruder Boskovic Institute	Croatia
Mazloom Shahraki Azadeh	Institute for Advanced Studies in Basic Sciences (IASBS), Physics department	Islamic Republic of Iran
Memarzadeh Isfahani Laleh	Department of Physics Sharif University of Technology Azadi Ave. 11155-9161 Tehran ISLAMIC REPUBLIC OF IRAN	Islamic Republic of Iran
Mezio Alejandro	School of Mathematics and Physics, The University of Queensland	Australia
Mir Moslem	Institute for Advanced Studies in Basic Sciences IASBS	Islamic Republic of Iran
Mitscherling Johannes	Max Planck Institute for Solid State Research	Germany
Mondragon Shem Ian	Department of Physics, Yale University	United States of America
Odriazola Alexander	Lab. of Physics, Tampere University of Technology	Finland
Oliinyk Artem	Taras Shevchenko National University of Kyiv Faculty of Physics Chair of Quantum Field Theory Academician Glushkov Avenue, 4 Building 1	Ukraine
Pal Biplab	Max Planck Institute for the Physics of Complex Systems (MPIPKS)	Germany
Paoloni Daniele	Department of Mathematics and Physics of Roma Tre	Italy
Patucha Konrad	Institute of Low Temperature of Structure Research Polish Academy of Sciences, Division of Theory of Condensed Matter, Department of Theory of Superconductivity and Superfluidity	Poland
Poboiko Ihor	Skolkovo Institute of Science and Technology, Center for Photonics and Quantum Materials	Russian Federation
Poletti Dario	Singapore University of Technology and Design	Siingapore
Potirniche Ionut-dragos	University of California, Berkeley Physics Department Ehud Altman Group	United States of America
Purkayastha Archak	International Centre for Theoretical Sciences, Tata Institute of Fundamental Research	India

Ramachandran Ajith	Center For Theoretical Physics of Complex Systems, Institute for Basic Science	Republic of Korea
Ramirez Gomez Hanz	School of Physics, Universidad Pedagogica y Tecnologica de Colombia	Colombia
Ray Sayak	Department of Physical Sciences, Indian Institute of Science Education and Research Kolkata	India
Ren Junfeng	School of Physics and Electronics, Shandong Normal University	People's Republic of China
Renu Bala -	Department of Physics, MCM DAV College for Women, Affiliated to Panjab University, Sector 36, Chandigarh	India
Rodionov Iaroslav	Institute for Theoretical and Applied Electrodynamics	Russian Federation
Rodriguez Vega Martin	Indiana University	United States of America
Rostami Habib	Istituto Italiano di Tecnologia	Italy
Roy Analabha	Department of Physics, The University of Burdwan	India
Roy Arunesh	Zernike Institute for Advanced Material, University of Groningen	Netherlands
Sadhukhan Debasis	Quantum Information and Computation Group, Physics Division, Harish-Chandra Research Institute	India
Saxena Ruchi	HARISH CHANDRA RESEARCH INSTITUTE	India
Scaffidi Thomas	University of California - Berkeley	United States of America
Schiulaz Mauro	Department of Physics, Boston University	United States of America
Senouci Khaled	Universite de Mostaganem, Departement de Physique, Faculte des Sciences exactes et de l'informatique, departement de physique	Algeria
Seshadri Ranjani	Centre for High Energy Physics, Indian Institute of Science	India
Seyed Yazdi Jamileh	Vali-e-Asr University of Rafsanjan	Islamic Republic of Iran
Shabani Sara	Same as permanent institute	Islamic Republic of Iran
Shakirov Aleksei	Lomonosov Moscow State University, Faculty of Physics	Russian Federation
Shikin Valeriy	Institute of Solid State Physics, Theoretical Department	Russian Federation
Skorobagatko Glib	Institute for Condensed Matter Physics of NAS of Ukraine, Svientsitskii Street 1, 79011	Ukraine
Soltani Morteza	University of Isfahan, Department of physics	Islamic Republic of Iran

Ukraine Starodub Ivan Bogolyubov Institute for Theoretical Physics of the National Academy of Sciences of Ukraine, Theory of Nonlinear Processes in Condensed Matter Department, Laboratory of Strongly-correlated Low Dimensional Russian Federation Stepanov Nikolai Skolkovo Institute of Science and Technology, Center for Photonics and Quantum Materials Svetogorov Aleksandr Universite Grenoble Alpes; Physics, France engineering, earth and environmental sciences and mechanics teaching and research department; Laboratoire de Physique et Modelisation des Milieux Condenses (in CNRS) Max Planck Institute for Solid State Sykora Jachym Germany Research Taghizadeh Sisakht Esmaeil Isfahan University Of Technology Islamic Republic of Iran Department of physics Isfahan ISLAMIC REPUBLIC OF IRAN Tamir Idan Weizmann Institute of Science Faculty of Israel Physics Department of Condensed Matter Physics Dan Shahar Lab Tartaglia Elena Statistical Physics, SISSA. Italy Thomasen Andreas Mounir Demetry Theory of Quantum Matter Unit, Japan Okinawa Institute of Science and **Technology Graduate University** Tripathi Krashna Department of Physics, Harish Chandra India Research Institute Tsyplyatyev Oleksandr Johann Wolfgang Goethe-Universitat, Germany Institut fur Theoretische Physik Van Midden Marion Slovenia Jozef Stefan Institute, Ljubljana Condensed matter physics departement F5 Scanning Tunneling Microscopy lab Full professor of physics & Electrical United States of America Varonides Argyrios Engineering University of Scranton, Physics & Electrical Engineering Dept., Loyola Science Building, Room 151 Wang Pei Department of Physics People's Republic of China Zhejiang Normal University 688 Yingbin Avenue 321004 Jinhua Zhejiang PEOPLE'S REPUBLIC OF CHINA Wen Jing Key Laboratory for Photonic and People's Republic of China Electronic Bandgap Materials, Ministry of EducationÔ°å Harbin Normal University Wulayimu Maimaiti Institute for Basic Science Republic of Korea Wysokinski Karol Izydor Maria Curie-Sklodowska University, Poland Faculty of Mathematics, Physics & Informatics, Condensed Matter Theory

Department

NUS Graduate School for Integrative Sciences and Engineering Yap Han Hoe Singapore

Zeytinoglu Sina Switzerland

ETZH Zürich

Universite' Mohammed V Laboratoire de Physique Theorique Faculte' des Sciences B.P. 1014 Ziane Mustapha Morocco

Avenue Ibn Battouta

10000 Rabat