



The Abdus Salam
International Centre for Theoretical Physics



**WORKSHOP AND SCHOOL ON
TOPOLOGICAL ASPECTS OF CONDENSED MATTER PHYSICS**

ICTP, Trieste, 27 June to 8 July 2011

**co-sponsored by:
ICAM-12CAM Institute for Complex Adaptive Matter, Davis, CA, U.S.A.**

**TITLES OF POSTER PRESENTATIONS (as of 21.7.11)
Venue: Main Lecture Hall, Leonardo da Vinci Building**

ADROGUER, Pierre

CONDUCTANCE FLUCTUATIONS IN TOPOLOGICAL INSULATORS SURFACE STATES

ARREDONDO LEON, Yesenia

STUDY OF SPIN-POLARON FORMATION IN LOW-DIMENSIONAL SYSTEMS

BERRADA, K.

ASYMPTOTIC DYNAMICS OF QUANTUM DISCORD IN OPEN QUANTUM SYSTEMS

BEUGELING, Wouter

SPIN-IMBALANCED TOPOLOGICAL PHASES AND CHIRAL RASHBA STATES IN A FERMIONIC LATTICE

BONDESAN, Roberto

SPIN QUANTUM HALL EFFECT IN THE PRESENCE OF MULTIPLE EDGE CHANNELS

BUDICH, Jan C.

CHARGE-SPIN DUALITY IN NON-EQUILIBRIUM TRANSPORT OF HELICAL LIQUIDS

BURRELLO, Michele

ULTRACOLD ATOMIC GASES IN NON-ABELIAN GAUGE POTENTIALS AND DEFORMED QUANTUM HALL STATES

CARREGA, Matteo

ANOMALOUS CHARGE TUNNELING OF FRACTIONAL QUANTUM HALL EDGE STATES AT FILLING FACTOR $\nu = 5/2$.

DEO, Nivedita

CORRELATION FUNCTIONS AND NONEQUILIBRIUM ELECTRONIC TRANSPORT FOR GAS FLOW OVER A DNA FUNCTIONALIZED CARBON NANOTUBE

DICKMANN, Sergey

EXCITONIC REPRESENTATION AND NEW EXCITONIC COMPOSITE MODES IN QUANTUM HALL SYSTEMS

DUIVENVOORDEN, Kasper

SYMMETRY CLASSIFICATION OF TOPOLOGICAL INSULATORS

EDGE, Jonathan

QUANTUM HALL EFFECT IN A ONE-DIMENSIONAL DYNAMICAL SYSTEM

FATEMI, Valla

TUNABLE SURFACE-TO-BULK COHERENT COUPLING IN Bi_2Se_3 THIN FILMS

FERRARO, Dario

NON-ABELIAN BP THEORY FOR $2+1$ DIMENSIONAL TOPOLOGICAL STATES OF MATTER

FISCHER, Mark H.

EXOTIC SUPERCONDUCTIVITY AND LOCAL NON-CENTROSYMMETRICITY IN CRYSTAL LATTICES

FOSTER, Matthew

QUENCH SPECTROSCOPY OF A LUTTINGER LIQUID: FRACTIONALIZED DENSITY WAVES IN THE XXZ CHAIN (arXiv:1105.1786)

FULGA, I.C.

SCATTERING MATRIX APPROACH TO THE TOPOLOGICAL CHARGE

GAMMAG, Rayda

WILL TILTING LEAD TO SPLITTING? TILTING THE MAGNETIC FIELD IN A TWO-DIMENSIONAL ELECTRON GAS WITH RASHBA SPIN-ORBIT INTERACTION

HE, Jing

TOPOLOGICAL SPIN DENSITY WAVE

HOSUR, P.R.

MAJORANA MODES IN SUPERCONDUCTING DOPED TOPOLOGICAL INSULATORS

IMURA, Ken-Ichiro

SPIN BERRY PHASE IN ANISOTROPIC TOPOLOGICAL INSULATORS

IOSELEVICH, Pavel

ANOMALOUS JOSEPHSON CURRENT VIA MAJORANA BOUND STATES IN TOPOLOGICAL INSULATORS

KAMFOR, Michael

ROBUSTNESS OF THE TORIC CODE IN AN ARBITRARY MAGNETIC FIELD

KAVITHA, Louis

ENERGY LOCALIZATION IN FERROMAGNETIC MEDIA WITH DIPOLAR INTERACTIONS

KELLS, Graham

KALEIDOSCOPE OF TOPOLOGICAL PHASES WITH MULTIPLE MAJORANA SPECIES

KHARITONOV, Maxim

CORRELATED $\nu=0$ QUANTUM HALL STATES IN MONOLAYER AND BILAYER GRAPHENE

KHUDAYBERGANOV, Sardarbek B.

EFFECT OF METHYLATION ON STABILITY OF THE SURFACE OF SILICON NANOPARTICLES

KONSTANTINOU, Georgios

SOME EXACTLY-SOLVABLE QUANTUM PROBLEMS AND THEIR APPLICATIONS TO HETERO- AND NANO-STRUCTURES WITH NONTRIVIAL TOPOLOGY

KOTETES, Panagiotis

GIANT ANOMALOUS NERNST EFFECT IN TOPOLOGICAL INSULATORS

KRAUS, Yaacov

- 1) MAJORANA FERMIONS ON A RANDOM TRIANGULAR LATTICE
- 2) TOPOLOGICAL INDICES AS LOCAL PROPERTIES

LEVKIVSKYI, Ivan

THEORY OF FRACTIONAL QUANTUM HALL INTERFEROMETERS

MEIDAN, Dganit

TOPOLOGICAL CLASSIFICATION OF SPIN PUMPS

MÖLLER, Gunnar

QUASIPARTICLE EXCITATIONS IN THE MOORE-READ STATE

OSSIPOV, Alexander

CRITICAL EIGENSTATES OF THE LONG-RANGE RANDOM HAMILTONIANS

RAHMANI (RAHMANISISAN) Armin

OPTIMAL CONTROL FOR UNITARY PREPARATION OF MANY-BODY STATES: APPLICATION TO LÜTTINGER LIQUIDS

REYNOSO, Andreas A.

BALLISTICAL PROBING OF INTERFACE MAJORANA STATES IN A 1D QUANTUM WIRE WITH PROXIMITY EFFECT AND RASHBA COUPLING

RINGEL, Zohar

CHARGE PUMPING AND TOPOLOGICAL PROTECTION OF THE PHASE BOUNDARY BETWEEN A TOPOLOGICAL AND TRIVIAL Z_2 INSULATOR

ROMERS, Jesper C.

THE MODULAR S-MATRIX AS AN ORDER PARAMETER FOR TOPOLOGICAL PHASE TRANSITIONS

ROMITO, Alessandro

TOPOLOGICAL SUPERCONDUCTING PHASE AND MAJORANA END-STATE ENERGIES IN DISORDERED WIRES

SCHULZ, Marc Daniel

BREAKDOWN OF A $Z(3)$ TOPOLOGICAL PHASE

SHIVAMOGGI, Vasudha

EDGE STATES AND THE BULK-BOUNDARY CORRESPONDENCE IN DIRAC HAMILTONIANS

VAN DEN BERG, Tinke L.

SPIN HALL EFFECT IN DISORDERED ELECTRON SYSTEMS

VAYRYNEN, Jukka

ELECTRICAL CONTROL OF SPIN IN QUANTUM SPIN HALL EDGE STATES