

## LDQCM-15 Workshop

Monday 29<sup>th</sup> June – Friday 3<sup>rd</sup> July 2015

### PROGRAMME

#### DAY 1

TIME	TALK/ SESSION	LOCATION
09:00	<i>Ultrafast Switching to a Stable Hidden Quantum State in an Electronic Crystal - Dragan Mihailovic (Jozef Stefan Institute and Uni. Ljubljana)</i>	C0.110
10:00	<i>Exact diagonalizations of SU(N) Heisenberg models taking full advantage of SU(N) symmetry – Frederic Mila (Ecole Polytechnique Federale de Lausanne)</i>	
10:30	<i>New quasi-local conserved operators in XXX spin 1/2 chain – Tomaz Prosen (University of Ljubljana)</i>	
11:00	<b>COFFEE BREAK</b>	Chessboard
11:30	<i>Threshold singularities in 1D interaction fermion models – Fabian Essler (Oxford University)</i>	C0.110
12:00	<i>Lattice models with explicit, hidden and emergent supersymmetry – Liza Huijse (Stanford University)</i>	
12:30	<b>LUNCH BREAK</b>	Canteen
14:00	Free Discussion	A1.08, A1.10
15:00	<b>COFFEE BREAK</b>	Chessboard
15:30	Free Discussion	A1.08, A1.10
17:30	<b>DAY END</b>	

#### DAY 2

TIME	TALK/ SESSION	LOCATION
09:00	<i>Correlated topological insulators and Dirac metals – Fakher Assaad (University of Würzburg)</i>	C0.110
09:30	<i>Multipole expansion in the quantum Hall effect – Andrea Cappelli (INFN, Florence)</i>	
10:00	<i>Non-equilibrium transport and optical probes of topological phases – Joel Moore (UC Berkeley)</i>	
10:30	<i>Topological phenomena in periodically driven systems: the role of disorder and interactions – Erez Berg (Weizmann Institute)</i>	
11:00	<b>COFFEE BREAK</b>	Chessboard
11:30	<i>A parafermionic avatar of the MBL transition – Paul Fendley (Oxford University)</i>	C0.110
12:00	<i>Field Theories over MPS states – Andrew Green (UCL)</i>	
12:30	<b>LUNCH BREAK</b>	Canteen
14:00	Free Discussion	A1.08, A1.10
15:00	<b>COFFEE BREAK</b>	Chessboard
15:30	Free Discussion	A1.08, A1.10
18:00	<b>PUBLIC LECTURE: The Great Game - The fascinating language of symmetry – Giuseppe Mussardo (SISSA)</b>	C0.07 (City Centre)
19:00	<b>PUBLIC LECTURE RECEPTION</b>	C0.07 (Foyer)

### DAY 3

TIME	TALK/ SESSION	LOCATION
09:00	<i>'Solving' a Quantum Many Body Problem by Experiment – Jörg Schmiedmayer (Vienna Center for Quantum Science and Technology, TU-Wien)</i>	C0.110
10:00	<i>Non-equilibrium steady states in many-body quantum systems – Benjamin Doyon (King's College London)</i>	
10:30	<i>Quantum stutter: arrested expansion without a lattice and impurity snaking – Robert Konik (Brookhaven National Lab)</i>	
11:00	<b>COFFEE BREAK</b>	Chessboard
11:30	<i>Statistical Aspects of Quantum State Monitoring and Applications – Denis Bernard (ENS &amp; CNRS)</i>	C0.110
12:00	<i>Off-equilibrium QFT – Giuseppe Mussardo (SISSA)</i>	
12:30	<i>Status Report on Superconductivity in Strontium Ruthenate – Steve Simon (Oxford University)</i>	
13:00	<b>LUNCH BREAK</b>	Canteen
14:00	Free Discussion	A1.08, A1.10
15:00	<b>COFFEE BREAK</b>	Chessboard
15:30	Free Discussion	A1.08, A1.10
18:00	<b>WORKSHOP RECEPTION</b>	Hortus Botanicus

### DAY 4

TIME	TALK/ SESSION	LOCATION
09:00	<i>Geometro-dynamics of the fractional quantum Hall effect – F. Duncan M. Haldane (Princeton University)</i>	C0.110
09:30	<i>The fine structure of quantum hall edge states – Austen Lamacraft (University of Cambridge)</i>	
10:00	<i>Geometric responses of Quantum Hall systems – Alexandre Abanov (Stony Brook University)</i>	
10:30	<i>Prediction of Weyl Semimetal in TaAs – B. Andrei Bernevig (Princeton University)</i>	
11:00	<b>COFFEE BREAK</b>	Chessboard
11:30	<i>Tuning between Weyl semimetals and fractional Chern insulators in frustrated materials – Emil Bergholtz (Free University of Berlin)</i>	C0.110
12:00	<i>Entanglement- and Energy-Spectra of Conformal Critical Points – Andreas Läuchli (University of Innsbruck)</i>	
12:30	<i>Optical conductivity in the cuprates from holography and unparticles – Philip Phillips (University of Illinois)</i>	
13:00	<b>LUNCH BREAK</b>	Canteen
14:00	Free Discussion	A1.06, A1.08
15:00	<b>COFFEE BREAK</b>	Chessboard
15:30	Free Discussion	A1.06, A1.08
17:30	<b>DAY END</b>	

## DAY 5

TIME	TALK/ SESSION	LOCATION
09:00	<i>Topological states in driven photonic systems</i> – <b>Mohammad Hafezi (University of Maryland)</b>	<b>CO.110</b>
10:00	<i>Topology by Dissipation in Atomic Fermion Systems</i> – <b>Sebastian Diehl (TU Dresden)</b>	
10:30	<i>Symmetry-Protected Topological Orders at Finite Temperature</i> – <b>Miguel A. Martin-Delgado (Universidad Complutense Madrid)</b>	
<b>11:00</b>	<b>COFFEE BREAK</b>	<b>TBC</b>
11:30	<i>Gauge freedom in transport through quantum dots: interaction-induced geometric pumping</i> – <b>Maarten Wegewijs (Peter Grünberg Institute, Forschungszentrum Jülich)</b>	<b>CO.110</b>
12:00	<i>Unification of integrable steady states via supersymmetric Yangians</i> – <b>Enej Ilievski (University of Amsterdam)</b>	
12:30	<i>Conformal loop ensembles and Liouville at <math>c &lt; 1</math></i> – <b>Hubert Saleur (IPhT CEA Saclay)</b>	
<b>13:00</b>	<b>LUNCH BREAK</b>	<b>Canteen</b>
14:00	Free Discussion	<b>A1.08, A1.10</b>
<b>15:00</b>	<b>COFFEE BREAK</b>	<b>TBC</b>
15:30	Free Discussion	<b>A1.08, A1.10</b>
<b>17:30</b>	<b>DAY END</b>	