

Topological phases of matter: from the quantum Hall effect to spin liquids (TOPMAT)

IPhT (CEA & CNRS, Saclay, France) June 11th - July 6th, 2018

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	09/06	10/06	11/06	12/06	13/06	14/06	15/06	16/06	17/06	18/06	19/06	20/06	21/06	22/06
9h30			Welcome coffee							Welcome coffee				
10h			Presentations		C.-T. Hsieh					Presentations				
11h			O. Starykh	Vishwanath		I. Sodemann	D. Sheng			C. Xu	S. Capponi	J. Jain colloquium	F. Mila	M. Goerbig
12h														
13h			Lunch	Lunch	Lunch	Lunch	Lunch			Lunch	Lunch	Lunch	Lunch	Lunch
14h														
14h30			T. Senthil	A. Sandvik			A. Sterdyniak			P. Pujol	A. Chernyshev			F. Becca
15h30					R. Ganesh	C. Toke						C. Glattli	Ph. Mendels	
16h30			M. Oshikawa				H. Pothier							
17h30														

	23/06	24/06	25/06	26/06	27/06	28/06	29/06	30/06	01/07	02/07	03/07	04/07	05/07	06/07
9h30			Welcome coffee							Welcome coffee				
10h			Presentations											
11h			A. Macdonald	S. Simon	A. Wietek	D. Poilblanc	J. Vidal			H. Watanabe	K. Totsuka	K. Penc	M. Yamada	M. Zhitomirsky
12h														
13h			Lunch	Lunch	Lunch	Lunch	Lunch			Lunch	Lunch	Lunch	Lunch	Lunch
14h														
14h30			C. Repellin	A. Lauchli			J.-N. Fuchs			S. Simon colloquium	Y. Fuji			
15h30					F. Assaad	N. Chepiga						F. Bert	B. Estienne	
16h30														
17h30														

Color code for seminar rooms :
C. Itzykson
Amphi Bloch

Scientific coordinators: T. Jolicoeur (LPTMS), Ph. Lecheminant (LPTM) and G. Misguich (IPhT)

Organization & administration: K. Kolodziej (LPTMS & U. Paris-Saclay)

Speaker	Affiliation	Title
Fakher Assaad	University of Wuerzburg	Intertwined orders in Dirac fermions
Federico Becca	SISSA, Trieste	Spectral signatures of fractionalization in the frustrated Heisenberg model on the square lattice
Fabrice Bert	LPS, Orsay	Quantum spin liquids: beyond the kagome lattice
Sylvain Capponi	Université P. Sabatier, Toulouse	Symmetry protected topological phases in one-dimensional fermionic SU(N) models
Natalia Chepiga	EPFL, Lausanne	DMRG investigation of quantum dimer ladders
Alexander Chernyshev	UC Irvine	Topography and mimicry on a triangular lattice
Benoit Estienne	LPTHE, Paris	A Variational Approach to Chiral Topological Order Interfaces
Jean-Noël Fuchs	LPTMC, Paris	16-fold way in the Kitaev honeycomb model
Yohei Fuji	RIKEN	Quantum Hall hierarchy from coupled wires
R. Ganesh	Institute of Math. Sciences, Chennai	The quantum spin quadrumer: in how many ways can four spins add to zero ?
Christian Glattli	SPEC, Saclay	A Josephson relation for FQHE fractional charges
Mark Goerbig	LPS, Orsay	Volkov-Pankratov states in topological heterojunctions with smooth interfaces
Chang-Tse Hsieh	KIPMU, Kashiwa	Anomaly matching and symmetry-protected criticality in 1d quantum many-body systems
Jainendra Jain	Penn State	Fractional quantum Hall effect and the magic of emergence
Andreas Lauchli	University of Innsbruck	Computational Spectroscopy of Quantum Field Theories
Allan MacDonald	University of Texas, Austin	Broken Symmetries near Topological Insulator/ Normal Insulator Phase Transitions
Philippe Mendels	LPS, Orsay	Quantum kagome spin liquids: a local view
Frédéric Mila	EPFL, Lausanne	Generalization of the Haldane conjecture to SU(3)
Masaki Oshikawa	ISSP, Tokyo University	Polarization in quantum many-body systems
Karlo Penc	Wigner Res. Centre, Budapest	Topological Magnons in Kitaev Magnets at High Fields
Didier Poilblanc	Université P. Sabatier, Toulouse	PEPS chiral spin liquids
Hugues Pothier	SPEC, Saclay	Andreev states probed in a circuit-QED setup
Pierre Pujol	Université P. Sabatier, Toulouse	From frustrated magnetism to "spontaneous" and "switchable" topological insulators
Cécile Repellin	MIT	Gapped edge states and $6\pi i$ Josephson effect in a fractional quantum Hall - superconductor heterostructure
Anders Sandvik	Boston University, Boston	Exploring new quantum phase transitions with J-Q models
Todari Senthil	MIT	Correlated electronic phases in graphene moire superlattices
Donna Sheng	California State University Northridge	Spontaneously time-reversal symmetry breaking, quantum anomalous Hall effect and nontrivial current carrying states
Steve Simon	Oxford University	[Colloquium] Topologically Ordered Matter and Why You Should be Interested Quantum hall edge state Dynamics: New constraints from bulk edge correspondence
Inti Sodemann	Max Planck Inst. for Phys. of Complex Systems	Phase transitions of composite fermions and the shear sound of 2D fermi liquids
Oleg Starykh	Univ. of Utah, Salt Lake City	Spinon magnetic resonance
Antoine Sterdyniak	Max Planck Inst. for Quantum Optics, Garching	Symmetries of chiral topological spin liquid PEPS
Keisuke Totsuka	YITP, Kyoto University	Emergent gauge theories from a coupled array of wires -- coupled-wire construction demystified
Csaba Toke	Budapest University of Technology and Economics	Path-integral Monte Carlo simulation of systems in a magnetic field
Julien Vidal	LPTMC, Paris	Phase transitions in string-nets
Ashvin Vishwanath	Harvard University	Unifying Competing Orders on the Square and Triangular Lattice
Haruki Watanabe	University of Tokyo	Symmetry-based indicators of band topology
Alexander Wietek	University of Innsbruck	Numerical identification of quantum spin liquids
Cenke Xu	University of California, Santa-Barbara	Lieb-Schultz-Mattis Theorem and its generalizations from the Perspective of the Symmetry Protected Topological phase
Masahiko Yamada	ISSP, University of Tokyo	Emergent SU(4) symmetry and quantum spin-orbital liquid in α -ZrCl ₂
Mike Zhitomirsky	INAC, CEA, Grenoble	Jammed spin liquid in random bond kagome antiferromagnet