



## International Workshop on Entanglement Spectra in Complex Quantum Wavefunctions

12 – 16 November 2012

*Scientific coordination:*

**B. Andrei Bernevig**  
Princeton University  
USA

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*Organisation:*

**Katrin Lantsch**

The last decade has seen an explosion of interdisciplinary work using entanglement-related quantities in condensed matter. Among the many developments within this general theme, the study of the entanglement spectrum has emerged in very recent years as an extremely promising and informative theme.

The entanglement spectrum has surprised a rapidly growing community through ongoing discoveries of a remarkable amount of information contained in its structure. The quantity provides a novel opportunity of wavefunction tomography, the mapping out of the anatomy of complex many-particle wavefunctions. It also contains information about topological order in several unexpected ways.

This focus workshop will bring together researchers who have been studying entanglement spectra in diverse physical systems and models.

### The list of invited speakers:

V. Alba (Germany)	E. Bergholtz (Germany)	P. Calabrese (Italy)	J. I. Cirac (Germany)
J. Dubail (USA)	B. Estienne (USA)	G. Fiete (USA)	E. Fradkin (USA)
T. Grover (USA)	F.D.M. Haldane (USA)	C.L. Henley (USA)	T.L. Hughes (USA)
J.K. Jain (USA)	H. Katsura (Japan)	A. Ludwig (USA)	G. Misguich (France)
J. Moore (USA)	I. Peschel (Germany)	D. Poilblanc (France)	F. Pollmann (Germany)
X.-L. Qi (USA)	S. Rachel (USA)	N. Regnault (USA/France)	I. Rodriguez (Ireland)
J. Schliemann (Germany)	T. Senthil (USA)	D. Sheng (USA)	S. Simon (UK)
J.K. Slingerland (Ireland)	B. Swingle (USA)	A.M. Turner (The Netherlands)	F. Verstraete (Austria)
A. Vishwanath (USA)	X.-G. Wen (USA)	H. Yao (USA)	

**Applications** for participation and poster contributions are welcome and should be submitted by using the application form on the workshop's web page (please see URL below). The number of attendees is limited. The **registration fee** for the workshop is **120 €** and should be paid by all participants. Costs for accommodation and meals will be covered by the Max Planck Institute for the Physics of Complex Systems. Limited funding is available to partially cover travel expenses. Please note that childcare is available upon request.

**Applications received before 31 August 2012 are considered preferentially.**

### For further information please contact:

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