18th Symposium on Topological Quantum Information

8 – 10 June 2015, Athens, Greece

	Monday, June 8th	Tuesday, June 9th	Wednesday, June 10th
09:15 – 09:30	Introduction		
09:30 – 10:15	**Claudio Chamon** Fractionalization I	**Louis H. Kauffman** Non-commutative worlds, discrete physics and differential geometry	**Sofia Lambropoulou** An introduction to knot theory and to the Yokonuma-Hecke algebra invariants
10:15 – 11:00			**Jamie Vicary** Higher category theory and the classification of topological states of matter
11:00 – 11:30	Coffee break	Coffee break	Coffee break
11:30 – 12:15	**Louis H. Kauffman** Iterants, Majorana particles, the Dirac equation and topological quantum computing	**Claudio Chamon** Fractionalization II	**Claudio Chamon** Emergent irreversibility and entanglement spectrum statistics
12:15 – 13:00			**E. Floratos** Black holes – chaos – quantum information: A proposition for the quantization of spacetime
13:00 – 15:00	Lunch	Lunch	Lunch
15:00 – 15:45	**Adolfo G. Grushin** Visualizing the chiral anomaly in Dirac and Weyl semimetals	**Arkadiusz Wójs** Multi-partite composite fermion models of topological quantum liquids	
15:45 – 16:30	**Ville Lahtinen** Topologically protected Weyl semimetal on grain boundaries in topological insulators	**Zlatko Papic** Tunable multicomponent quantum Hall effect in bilayer graphene	
16:30 – 17:00	Coffee break	Coffee break	
17:00 – 17:45	**I. Tsochantzis** Quantum double construction of finite group algebra: a fundamental algebraic structure underlying the description of anyonic systems and their applications	**Panagiotis Kotetes** Majorana fermions in topological Shiba chains	
17:45 – 18:30	*Contributed talks (4 x 15')	**Sofyan Iblisdir** Rényi entropies of ultra-cold gases	
18:30 – 20:00	**Poster session w/ drinks**	**Poster session w/ drinks**	
20:00 –	Dinner	Dinner	

Contributed talks:

*The poster session will start at 18:45 on Monday

1. **Stathis Antoniou** (National Technical University of Athens)
   Extending topological surgery to natural processes and making a connection to a dynamical system

2. **Vassilios Yannopapas** (National Technical University of Athens)
   Topological photonics in artificial dielectrics and metamaterials

3. **Adrian Hutter** (University of Basel)
   Parafermions in a Kagome lattice of qubits for topological quantum computation

4. **James de Lisle** (University of Leeds)
   Induced topological order at the boundary of 3D topological superconductors