

# PEPS & Topological Matter (December 3-5, 2018)

**Lectures of David Perez-Garcia :** *Mathematical aspects of topological order in projected entangled pair states*

- **Monday December 3** : (on the morning: room 106, IMT 1R1 1st floor - on the afternoon: room 20, IRSAMC, 3R1B4 ground floor)

10h30 : coffee

11h-12h : David Perez-Garcia, 1st lecture

14h-15h : Colloquium IRSAMC by Didier Poilblanc, *Topological order in Condensed Matter and beyond*

15h30-16h30 : David Perez-Garcia, 2nd lecture

- **Tuesday December 4** : (seminar room, IRSAMC, LPT 3rd floor)

9:30 : coffee

10h00-10h30 : Matthieu Mambrini, *SU(N) symmetric PEPS*

10h45-11h15 : Ji-Yao Chen, *Topological Resonating-Valence-Bond spin liquid on the square lattice*

11h30-12:00 : Olivier Gauthé, *Trivial vs Topological SU(3) and SU(4) spin liquids*

- **Wednesday December 5** : (on the morning: seminar room IRSAMC, LPT 3rd floor - on the afternoon: room 106, IMT 1R1 1st floor)

10h30 : coffee

11h00-12h00 : Seminar LPT by David Perez-Garcia, *Matrix Product Operators in Quantum Information and Quantum Spin Systems*

14:00-14:45 : Cécilia Lancien, *Some properties of random matrix product states and projected entangled pair states*

15:00-16:00 : David Perez-Garcia, 3rd lecture

16:15-17:00 : Tristan Benoist, *Quantum detailed balance, repeated measurements and uniqueness of (block-)injective matrix product states*