



**Irfu**  
Institut de recherche  
sur les lois fondamentales  
de l'Univers

**Séminaire  
SPP**

**Lundi 06/03/2017, 11h00-12h00**

CEA-Saclay Bat 141, salle Andr © Berthelot

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# Overview of Loop Quantum Gravity

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I will present an overview of the loop quantum gravity framework, from its canonical formulation in terms of spin network states for quantum geometry and its covariant path integral formulation in terms of spinfoam amplitudes to its most recent reformulation as group field theories and tensor models. I will briefly talk about the applications of this framework to black holes and quantum cosmology. This will lead to discuss the recent progress on boundary dynamics, entanglement on spin networks, and the issue of coarse-graining and continuum limit

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Le caf © sera servi 10 minutes avant.

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