

CEA - Saclay 91191 Gif-sur-yvette Cedex  
**Service de Physique de l'Etat Condensé**  
**SÉMINAIRE**

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**Mercredi 23 septembre 11h15**

**Orme des Merisiers SPEC Salle Itzykson, Bât.774**

**Itinerant magnetism on the optical lattice and coherent enhancement of magnetic resonance**

**Seiji Miyashita (Tokyo Univ.)**

We study an adiabatic transition between the non-magnetic Mott state and the ferromagnetic Nagaoka state in the Hubbard model when a particle is removed from the system. We also study dynamical aspects of this transition, and discuss enhancement of the magnetic resonance as a kind of super-radiance in a magnetic system. We also study properties of the ground state of itinerant magnetic systems with particles with large spins ( $S > 1/2$ ), which could be realized in laser-cooled optical lattices.

PS : Un café sera servi à 11h.