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

Mercredi 9 mai 11h15

Orme des Merisiers SPEC Salle Itzykson, Bât.774

Quantum measurement meets the magnon: an interesting coupling?

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The emerging field of magnonics—the study of spin-wave and magnon dynamics in magnetic films and nanostructures—provides a valuable window into the underlying mechanisms of static and dynamic magnetism, and is increasingly widely recognized as an area of science with significant technological potential. However, research to date has focussed strongly on the classical, rather the quantum, regime. This talk will offer a general introduction to magnon dynamics and magnonics, and seek to stimulate discussion about the potential of quantum magnon dynamics to provide the basis for interesting new directions in experimental quantum measurement and information processing.

The seminar will be given in English. A coffee break will be served at 11h00.

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