



ΓΕΝΙΚΟ ΣΕΜΙΝΑΡΙΟ ΤΜΗΜΑΤΟΣ ΦΥΣΙΚΗΣ

PHYSICS COLLOQUIUM

Thursday, 25 February 2010 17:00-18:00

3rd Floor Seminar Room

"Towards Controlled Matter Wave Pulsed with Bose-Einstein Condensates"

Lukas Buchmann FORTH

Abstract:

"Matter waves are an intriguing core concept of quantum mechanics with many potential applications. Many of the schemes that have been proposed for the production of coherent matter waves, rely on Bose-Einstein condensation in dilute atomic gases. In this talk, I will informally introduce Bose-Einstein condensation and present recent theoretical results pertaining to the controlled merging of independent condensates, as well as briefly discuss the generation of correlated directional atomic clouds via mixing of optical and matter waves."