Seminar: "Geometry&Physics", DFT (IFIN-HH) (Seminar Homepage) (Indico Page)

Location: DFT seminar room, IFIN-HH, Magurele

Date: Wednesday, August 10, 2016, 11:00 AM

## *Title*: Coherent states and Berezin transforms attached to Landau levels

Speaker: **Prof. Zouhair Mouayn** (Sultan Moulay Slimane University, Morocco)

Abstract: "We review the definition and properties of coherent states with examples. We construct coherent states attached to Landau levels on the Poincare disk  $\mathbb{D}$ , Euclidean plane  $\mathbb{C}$  and the Riemann sphere  $\mathbb{CP}^1$ . Generalization to the complex unit ball  $\mathbb{B}^n$ , to  $\mathbb{C}^n$  and  $\mathbb{CP}^n$  are also discussed. In these cases, we apply a coherent states quantization method to recover the corresponding Berezin transforms and we give formulae representing these transforms as functions of Laplace-Beltrami operators.