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

Location: DFT seminar room (IFIN-HH) Bucharest

Date: Wednesday, July 27, 2016, 11:00 AM

## Title: Topological obstructions for bundles of Clifford modules

Speaker: **Dr. Calin LAZAROIU** (IBS – Center for Geometry and Physics, Pohang, Korea)

Abstract: "On a pseudo-Riemannian manifold, I show that the groupoid of bundles of Clifford modules satisfying a certain "weak faithfulness" condition is equivalent with the groupoid of so-called real Lipschitz structures, a notion generalizing that of spin structure. Using this result, I extract the topological obstructions to existence of such bundles on a pseudo-Riemannian manifold of arbitrary dimension and signature. I also briefly discuss some applications to the spin geometry of supergravity and string theory."