

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

*Location:* DFT seminar room, IFIN-HH, Magurele

*Date:* Friday, July 21, 2017, 11:30 AM

*Title:* **A differential model for B-type Landau-Ginzburg theories**

*Speaker:* **Dr. Mirela Babalic** (IBS-CGP & DFT IFIN-HH)

*Abstract:* "We describe a mathematically rigorous differential model for B-type open-closed topological Landau-Ginzburg theories defined by a pair  $(X, W)$ , where  $X$  is a non-compact Kählerian manifold with holomorphically trivial canonical line bundle and  $W$  is a complex-valued holomorphic function defined on  $X$  and whose critical locus is compact but need not consist of isolated points. In this generality, we give rigorous constructions of the topological D-brane category, bulk algebra, bulk-boundary and boundary-bulk maps as well as of the bulk and boundary topological traces. We also show how this construction specializes to the case when  $X$  is Stein and  $W$  has finite critical set, in which case one recovers a simpler mathematical model."