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

Location: IMAR, room 306 (Constantin Banica)

Date: Thursday, March 1st, 2018, 10:15 AM

Title: **Matrix Factorizations over Bezout and Elementary Divisor Domains**

Speaker: **Dr. Calin Lazaroiu** (IBS-CGP, Pohang)

Abstract: "We study the triangulated category hef(R,W) of elementary matrix factorizations over a Bezout domain R, for a superpotential which is critically finite and prove a formula for the number of isomorphism classes of its objects. When R is an elementary divisor domain, we show that the triangulated category hmf(R,W) of all finite-rank factorizations is Krull-Schmidt with Auslander-Reiten triangles and compute its Auslander-Reiten quiver. In this case, we also prove a non-Noetherian generalization of the Buchweitz correspondence. As our main application, we describe the category of holomorphic factorizations over any connected, smooth, non-compact and borderless Riemann surface (which need not be affine algebraic and hence could have infinite genus)."