

Speaker: Jongmyeong Kim (IBS Center for Geometry and Physics)

Title: Categorical entropy, (co-)t-structures and ST-triples

Time: May 31 (Tu.), 2:45-3:45pm (Beijing time)

Venue: Zoom Meeting 984 962 1397 (no password required)

Abstract: In this talk, we study a dynamical property of an exact endofunctor F of a triangulated category D . In particular, we consider the following question: Given full triangulated subcategories A and B of D such that F restricts to A and B , how the categorical entropies of the restricted functors are related? To answer this question, we will introduce new entropy-type invariants using bounded (co-)t-structures with finite (co-)hearts and see their basic properties. We then apply these results to answer our question for the case where our A and B form an ST-triple. In such a case, A has a bounded t-structure and B has a bounded co-t-structure which are, in some sense, dual to each other. If time permits, we will see how the above results can be interpreted in terms of symplectic geometry.