

Seminar: "Geometry&Physics"
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Location: DFT seminar room, IFIN-HH, Magurele

Date: Thursday, August 30, 2018, 10:30 a.m., IMAR, room 306-307 (C. Banica)

Title: **Computing categorical Gromov-Witten invariants beyond genus one**

Speaker: **Dr. Andrei Caldararu** (Wisconsin University)

Abstract: "In a 2005 paper, Kevin Costello introduced numerical invariants associated to a Calabi-Yau category. They are expected to generalize the classical Gromov-Witten invariants counting curves of fixed genus g in a symplectic manifold X (by taking the target category to be the Fukaya category of X).

Costello's invariants are notoriously hard to compute: the only invariants known so far are for $g=1$, with target category the derived category of an elliptic curve [Caldararu-Tu 2017].

In my talk I will begin by outlining the main ideas underlying Costello's definition. In the second half of my talk I will describe work in progress showing that in principle all the higher genus invariants are computable (assuming the existence of a very large computer). This is joint work with Junwu Tu."