

”The Trans-Carpathian Seminar on Geometry & Physics”

(See also the [Geometry & Physics @ DFT](#) seminar homepage)

Date: Wednesday, Nov. 27, 2024, 15:15 EET (Bucharest time)

Location: online via Zoom

Speaker: **Prof. Marian Aprodu** (University of Bucharest & IMAR)

Title: **Resonance and vector bundles**

Abstract: Resonance varieties are algebro-geometric objects that emerged from the geometric group theory. They are naturally associated to vector subspaces in second exterior powers and carry natural scheme structures that can be non-reduced. In algebraic geometry, they made an unexpected appearance in connection with syzygies of canonical curves. In this talk, based on works with G. Farkas, Y. Kim, C. Raicu, A. Suciuc, and J. Weyman, I report some recent results concerning the geometry of resonance schemes in the vector-bundle setup.

The seminar is planned for 50 min with some additional time for questions.