

Moduli of framed sheaves on Hirzebruch surfaces

Monday, 6 October 2025 11:00 (1 hour)

In this talk, I shall survey three papers devoted to the study of moduli spaces of framed sheaves on Hirzebruch surfaces, two of which were written in collaboration with Ugo Bruzzo. These contributions pursue a common objective: the construction of a quiver-theoretic description of such moduli spaces, starting from the monadic description previously established by Bartocci, Bruzzo, and Rava. To date, this objective has been fully realized only in the rank-1 case—corresponding to Hilbert schemes of points on suitable line bundles over $\mathbb{P}^1$ —and in the so-called minimal case, where minimality refers to a bound on the numerical invariants of the sheaves that guarantees the non-emptiness of the moduli space. In the concluding part of the talk, I will discuss possible directions for future research on the subject.

Presenter: LANZA, Valeriano (Universidade Federal Fluminense, Brazil)