

Colloquium

University of Notre Dame
Department of Mathematics

Claudiu Raicu - University of Notre Dame

Speaker: Claudiu Raicu

University of Notre Dame



Will give a lecture entitled

Cohomology of line bundles on flag varieties

Date: Wednesday, October 26, 2022

Time: 4:00 PM

Location: 231 Hayes-Healy Hall

Zoom URL: notredame.zoom.us/j/99986867672?pwd=Z2NJRIZwL0dTRONxbk50NEIHK0dNdz09

Departmental Tea: Tea in Room 257 (lounge in Hurley Hall) at 3:30 p.m.

Abstract:

A fundamental problem at the confluence of algebraic geometry and representation theory is to understand the structure and vanishing behavior of the cohomology of line bundles on flag varieties. Over fields of characteristic zero, this is the content of the Borel-Weil-Bott theorem and is well-understood, but in positive characteristic it remains wide open, despite important progress over the years. My talk, based on recent projects with Zhao Gao and with Keller VandeBogert, will try to illustrate some of the difficulties that occur when passing from characteristic zero to positive characteristic.