1176-13-311   **Zhao Gao** and **Claudiu Raicu*** (`craicu@nd.edu`). *Cohomology of line bundles on the incidence correspondence.* Preliminary report.

Let X denote the incidence correspondence (or partial flag variety) parametrizing pairs consisting of a point in projective space and a hyperplane containing it. I will explain how to characterize the vanishing and non-vanishing behavior of the cohomology groups of line bundles on X over an arbitrary field. For the projective plane, the results are contained in the thesis of Griffith from the 70s, while in characteristic zero the cohomology groups are described in any dimension by the Borel-Weil-Bott theorem. Joint work with Zhao Gao. (Received January 25, 2022)