

Algebraic Geometry Seminar

Duality in Boij–Soederberg Theory

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Abstract: The central idea in Boij–Soederberg Theory is that there is a connection between free resolutions over the polynomial ring and sheaf cohomology on projective space. I'll provide motivation for this connection with an example, looking at properties of the long exact sequence in sheaf cohomology from a new perspective. Then I'll describe the construction of a duality pairing that leads to precise duality results relating free resolutions and sheaf cohomology. This is joint work with David Eisenbud.

Wednesday, April 18 at 4:00 PM in SEO 427