

# Columbia University

## Algebraic Geometry Seminar

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Harvard University

### SECTIONS OVER CURVES AND RATIONAL CONNECTIVITY

This talk will be a sequel to the talk given by Joe Harris in the fall. I will describe a necessary and sufficient condition, in terms of rationally connected subvarieties, for a morphism  $X \rightarrow B$  to admit a section when restricted to an arbitrary curve in  $B$ . This result can be used to deduce the existence of a one-parameter family of Enriques surfaces with no section, answering negatively a question of Serre. The talk will be based on joint work with Joe Harris, Barry Mazur, and Jason Starr.

Friday, January 25, 2002

2:30pm

Mathematics 417