

# Mathematics Department Colloquium

Organizer: Kenneth Ribet

Thursday, 4:10–5:00pm, 60 Evans Hall

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May 8     **Phillip Griffiths**, Institute for Advanced Study, Princeton  
*Exterior Differential Systems in Algebraic Geometry*

Exterior differential systems (EDS) provide the basic tool for studying the geometry of differential equations. There is a canonical exterior differential system that governs the behavior of the Hodge structure in a family of algebraic varieties. We will review the basics of EDS's and explain two central open questions. Then we will recall the definition of the canonical system and give two applications to algebraic geometry.