## Mathematics, Statistics, and Computer Science **@ UIC**

## Algebraic Geometry Seminar

## On the motive of the stack of vector bundles on a curve

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**Abstract:** Following Grothendieck's vision that many cohomolgical invariants of of an algebraic variety should be captured by a common motive, Voevodsky introduced a triangulated category of mixed motives which partially realises this idea. After describing this category, I will explain how to define the motive of certain algebraic stacks in this context. I will then report on joint work in progress with Victoria Hoskins, in which we study the motive of the moduli stack of vector bundles on a smooth projective curve and show that this motive can be described in terms of the motive of this curve and its symmetric powers.

Wednesday, March 14 at 4:00 PM in SEO 427