1125-VA-2931   **Kimmy Cushman*** (`cushkk80@oneonta.edu`). *Connecting the Algebraic Theory of Lie Algebra Spinor Representations to Applications in Physics.* Preliminary report.

This talk is a continuation of Jonathan Brown's talk introducing spinors from the point of view of an algebraist. We will investigate how the algebraic representation theoretic approach shines light on realizations in physical theories. We will explain how the Dirac equation describes the behavior of quantum particles such as electrons, and how the Dirac equation relies heavily on the algebraic objects, spinors, introduced by Elié Cartan. (Received September 20, 2016)