1125-16-1794   **Cris Negron*** (`negronc@mit.edu`). *Hopf algebras, tensor categories, and gauge invariants.*

I will define a Hopf algebra and explain how any Hopf algebra gives rise to a so called tensor category. I will explain how, from a number of perspectives, the tensor category is a more fundamental object than the Hopf algebra. With this in mind, I will discuss a number of invariants which help us to study tensor categories directly. (Some of this is joint work with Richard Ng.) (Received September 19, 2016)