

Title: Hopf algebras

Abstract: A Hopf algebra is an algebra for which it is possible to form the tensor product of two representations. To do that, one needs an additional structure element, the so-called coproduct.

In the talk, we first explain what this really means and in this way arrive at a more precise definition of a Hopf algebra. We then describe how the concept developed historically, explain several of the main results of the theory, and finally discuss which open problems still remain.