1139-16-544        **Yevgenia Kashina\***, Department of Mathematical Sciences, DePaul University, Chicago, IL.
*Extensions of Yetter-Drinfel'd Hopf Algebras II.* Preliminary report.

Extensions of Hopf algebras can be described by four structure elements: an action, a corresponding cocycle, a coaction, and a corresponding dual cocycle. For Yetter-Drinfel'd Hopf algebras, there is a generalized concept of extensions that was discussed in the previous talk. To describe this setting, two new structure elements are necessary: a so-called deviation map and a codeviation map. In this talk, we will explain what these are and how they can be used to build extensions in the generalized sense just mentioned. The talk is based on joint work with Yorck Sommerhäuser. (Received February 19, 2018)