# Splittings of two-generator one-relator groups

**Stefan Friedl**

Universität Regensburg, Germany
`sfriedl@gmail.com`

*The talk is based on the joint work with Stephan Tillmann*

*Session: 15. Groups and Topology*

We will use Fox derivatives to associate to a two-generator one-relator presentation a polytope with marked vertices. We will show that in most, possibly all, cases this polytope determines the Bieri-Neumann-Strebel invariant and the minimal complexity of HNN-decompositions of the group.