

# CONJUGACY PROBLEMS IN THOMPSON'S AND HIGMAN-THOMPSON'S GROUPS

BIANCA B DORNELAS  
STATE UNIVERSITY OF CAMPINAS - UNICAMP

The conjugacy problem asks if, given a finitely generated group  $G$  with generating set  $S$ , it is possible to decide whether two given words are conjugated elements of  $G$ . That is, given two words  $w_1, w_2$  in the  $S$  alphabet, representing the group elements  $g$  and  $h$ , respectively, can we decide if there is  $z \in G$  such that  $g = zhz^{-1}$ ? There are a number of variations of this problem, such as the twisted and power conjugacy problems, and some results concerning them can be obtained for the Thompson's and Higman-Thompson's groups.

In this talk we will define the Thompson's groups  $F, T$  and  $V$ , giving some of their main properties and results on their conjugacy problems. After that, we will construct the Higman-Thompson groups, which can be viewed as a generalization of the first three groups. Again, we will state some of the main properties and results about their conjugacy problems.

## REFERENCES

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(Bianca B Dornelas)

*E-mail address:* bianca.dornelas@gmail.com