1131-20-347 Rachel Skipper* (skipper@math.binghamton.edu), Department of Mathematical Sciences, Binghamton University, PO Box 6000, Binghamton, NY 13902-6000. The congruence subgroup problem for a family of branch groups.

A group acting on a spherically homogeneous rooted tree has the congruence subgroup property if every subgroup of finite index contains a level stabilizer. The congruence subgroup problem then asks to quantitatively describe the kernel of the surjection from the profinite completion to the topological closure as a subgroup of the automorphism group of the tree.

We will study the congruence subgroup property for a family of branch groups whose construction generalizes that of the Hanoi Towers group, which models the game "The Towers of Hanoi". (Received July 18, 2017)