1099-01-275 **Su Gao*** (sgao@unt.edu), Department of Mathematics, 1155 Union Circle #311430, University of North Texas, Denton, TX 76203. Countable group actions and Borel homomorphisms.

I will talk about some recent results on Borel homomorphisms from Borel graphs into finite graphs. The Borel graphs arise from countable group actions and are induced from the Caley graphs of the acting group. The existence of continuous chromatic colorings on the Borel graphs is a special case of the existence problem of Borel homomorphisms. The work reported in my talk comes from joint work within Steve Jackson, Edward Krohne, and Brandon Seward. (Received February 10, 2014)