Ivan Dungan* (gdungan@math.fsu.edu). *Algebraic Model of Morphisms between Infinity Group Stacks.* Preliminary report.

We will continue the work of Ettore Aldrovandi’s and Behrang Noohi’s realization of morphisms between 2-group stacks as butterflies of an algebraic construct, crossed modules, to the infinite case. First, we will produce an algebraic model of infinity group stacks and then formulate the shape of the ”weak” morphisms. All of which will be done through homotopical methods. (Received September 25, 2012)