962-20-1193 **Lucy Lifschitz*** (lucy.lifschitz@tufts.edu), Department of Mathematics, Tufts University, Medford, MA 02155, and **Andrei S Rapinchuk** (asr3x@virginia.edu), Department of Mathematics, University of Virginia, Kerchof Hall, Charlottesville, VA 22904. *Abstract homomorphisms of algebraic groups with non-reductive image.* Preliminary report.

We study abstract homomorphisms of simple isotropic algebraic groups with non-reductive image. The case of reductive image was completely described by A. Borel and J. Tits in 1973. We show (with some exceptions in positive characteristic case) that when the group is split or quasisplit, all abstract homomorphisms come from a homomorphism of underlying field and a rational homomorphism of algebraic groups. This was previously conjectured for all isotropic simple groups by A. Borel and J. Tits. We also give an explicit description of all field homomorphisms and rational maps arizing in this situation. (Received October 02, 2000)