1120-57-235 **Azer Akhmedov** and **Cody Martin*** (cody.martin@ndsu.edu), 514 29th Ave N, Apt 23, Fargo, ND 58102. *The Non-bi-orderability of* 6_2 *and* 7_6.

A group G is said to be left-orderable if there exists a total order on G that is invariant under left multiplication. A bi-order on a group G is left order which is also invariant under right multiplication.

Given a knot K, we define the knot group to be $\pi_1(\mathbb{S}^3 \backslash K)$. It can be shown that every knot group is left-orderable; however, not every knot group is bi-orderable (e.g. the trefoil). Other than the knots 6_2 and 7_6, the bi-orderability of all knots up to seven crossings was known. Using tools such as HNN extensions and the subgroup of infinitesimals, we show 6_2 and 7_6 are not bi-orderable. This is a joint work with Azer Akhmedov. (Received February 22, 2016)