1123-57-344 **Azer Akhmedov***, 1210 Albrecht Boulevard, Department of Mathematics, North Dakota State University, Fargo, ND 58102, and **Cody Martin**, 1210 Albrecht Boulevard, Department of Mathematics, North Dakota State University, Fargo, ND 58102. *On non-embeddability of knot groups into the group of analytic diffeomorphisms of the interval.* Preliminary report.

Every knot group is known to be left-orderable thus it embeds in $\mathrm{Homeo}_+(I)$ - the group of orientation preserving homeomorphisms of the interval $I = [0, 1]$. By far, not every knot group is bi-orderable. The bi-orderability of a knot group has interesting topological consequences for a Dehn filling of the knot.

Embedding a group into $\mathrm{Diff}^{\omega}_+(I)$ - the group of orientation preserving analytic diffeomorphisms of the interval would imply its bi-orderability. Thus the question of which knot groups embed into $\mathrm{Diff}^{\omega}_+(I)$ becomes interesting.

In a joint work with M.Cohen, the first author has classified all RAAGs which embed in $\mathrm{Diff}^{\omega}_+(I)$. By extending the techniques of this work, we provide an answer to the embeddability question for the knot groups. (Received August 29, 2016)