1046-57-2121 **Ivan A. Dynnikov***, Dept. of Mechanics and Mathematics, Moscow State University, GSP-1, Moscow, 119991. *A geometrical approach to the braid conjugacy problem* Preliminary report.

I will speak about an approach to the Conjugator Search problem in braid groups based on analyzing the structure of the homeomorphism of a puncutred disc representing the given braid. The approach is conjectured to give an algorithm which is polynomial in both braid length and braid index. This work is in progress. (Received September 22, 2008)