1083-22-225   **Roman Bezrukavnikov*** (`bezrukav@math.mit.edu`), 77 Massachusetts ave, #2-284, MIT, Cambridge, MA 02139. *Character sheaves on loop groups and endoscopy.*

I will describe a joint project with D. Kazhdan and Y. Varshavsky where we develop an analogue of the notion of a character sheaf for a loop group. The conjectural picture provides a categorical framework for understanding the phenomenon of endoscopy, the results obtained so far provide a geometric approach to known results on depth zero L-packets (studied by Kazhdan-Varshavsky and De Backer-Reeder), new results on projector to the unipotent spectrum of a p-adic group etc. (Received August 28, 2012)