1043-22-170 **Jeffrey Adams*** (jda@math.umd.edu), Mathematics Department, University of Maryland, College Park, MD 21210. *Computing unipotent representations using the Atlas software.* Preliminary report.

The Atlas of Lie Groups and Representations software is a tool for computing with representation theory of real Lie groups. I will illustrate the software in the context of unipotent representations. In particular, I will discuss what the software tells about computing Arthur packets of unipotent representations. (Received August 26, 2008)