

1154-22-1625 **Jeffrey D Adams*** (jda@math.umd.edu), College Park, MD 20742. *Computing Unipotent Representations*. Preliminary report.

Jim Arthur has conjectured the existence of certain representations of a reductive group over a local field, which he calls unipotent. In general there is no single well defined definition of this term. Even in the case of real groups there is more than one definition of the term unipotent. Furthermore, even in cases when there is a precise definition there is typically no known algorithm to explicitly compute these representations, say in terms of their Langlands parameters.

In this talk I will discuss some progress on computing unipotent representations in the real case. This is part of the Atlas of Lie Groups and Representations project. (Received September 16, 2019)