1147-11-486 MICHAL ZYDOR* (mzydor280gmail.com), 1020 Lincoln Ave APT 2, Ann Arbor, MI 48104. Periods of automorphic forms over reductive groups.

Periods of automorphic forms have an important place in the theory of automorphic representations. They are often related to special values of L-functions and have applications to arithmetic geometry and analytic number theory. For an automorphic form on a group G, a period is its integral over a subgroup. If the automorphic form is not cuspidal such integrals are usually divergent. It is nonetheless possible in certain cases to extend the definition of the period to almost all automorphic forms which has direct applications to the study of the given period. In this talk I will describe a general procedure of defining such periods in the case when the subgroup is reductive. I will also discuss the joint work with A. Pollack and C. Wan that applies this to the study of special values of certain L-functions. (Received January 24, 2019)