

Berndt, R.

On automorphic forms for the Jacobi group. (English) Zbl 0822.11042
Jahresber. Dtsch. Math.-Ver. 97, No. 1, 1-18 (1995).

The paper under review contains a survey about the theory of Jacobi forms. The author starts with the definition of the Jacobi group G^J as the semi-direct product of $SL_2(\mathbb{R})$ with the Heisenberg group and sketches the historical development of the theory of Jacobi forms. Then the general theory of automorphic forms for reductive groups is compared with the one for the non-reductive group G^J . Next the connection between Jacobi forms and the discrete series representation of G^J is explained. The final part is devoted to the question how to establish a canonical theory of L -functions for Jacobi forms, for instance by using Whittaker models.

Reviewer: [A.Krieg \(Aachen\)](#)

MSC:

- [11F55](#) Other groups and their modular and automorphic forms (several variables)
- [11F66](#) Langlands L -functions; one variable Dirichlet series and functional equations
- [11-02](#) Research exposition (monographs, survey articles) pertaining to number theory
- [11F70](#) Representation-theoretic methods; automorphic representations over local and global fields
- [32N10](#) Automorphic forms in several complex variables

Cited in **3** Documents

Keywords:

survey; Jacobi forms; Jacobi group; historical development; discrete series representation; L -functions; Whittaker models