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Formes de Jacobi et formule de Weber p-adique. (French. English, French summaries) [Jacobi forms and p-adic Weber formula]

J. Théor. Nombres Bordeaux **11** (1999), *no. 2,* 317–329.

The classical theory of Klein, Siegel, and Weber functions and the relations between them may be interpreted in the context of meromorphic Jacobi forms. In this note the author continues previous work in this direction by himself and G. Robert [C. R. Acad. Sci. Paris Sér. I Math. **325** (1997), no. 5, 455–460; MR1692306 (2000g:11035)] and constructs a p-adic analogue of the meromorphic complex Jacobi form $D_L(z,\varphi)$ (L a complex lattice, $z,\varphi\in\mathbf{C}$). Using the fact that this function can be expressed as a quotient of suitable Jacobi theta functions and Roquette's theory of elliptic functions over local fields, he shows as his main result that it satisfies a simple additive distribution and an inversion relation.

Reviewed by *Rolf Berndt*