

## Hilbert quasimodular forms and Hilbert Jacobi-like forms

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**Abstract.** Quasimodular forms and Jacobi-like forms generalize modular forms and Jacobi forms, respectively, and Hilbert quasimodular forms and Hilbert Jacobi-like forms are their extensions to several variables. They are linked to each other due to the fact that each coefficient of a Hilbert Jacobi-like form is a Hilbert quasimodular form. Given a Hilbert quasimodular form, we construct a Hilbert Jacobi-like form which has the given function as one of its coefficients. The resulting Hilbert Jacobi-like form generalizes the Cohen–Kuznetsov lifting of a modular form.

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