

Year: 2016

Vol.: 88

Fasc.: 3-4

**Title:** Hilbert 2-class fields and 2-descent

**Author(s):** Franz Lemmermeyer

We give a construction of unramified cyclic octic extensions of certain complex quadratic number fields. The binary quadratic form used in this construction also shows up in the theory of 2-descents on Pell conics and elliptic curves, as well as in the explicit description of cyclic quartic extensions.

**Address:**

Franz Lemmermeyer

Mörikeweg 1

73489 Jagstzell

Germany