HESTER GRAVES, Queen’s University, Jeffery Hall, University Avenue, Kingston, Ontario

Euclidean Ideals in Quadratic Imaginary Fields

Lenstra generalized the idea of a Euclidean domain to the concept of a Euclidean ideal. The existence of a Euclidean ideal in a Dedekind domain implies that said domain has cyclic class group. He listed all the quadratic imaginary fields with an ideal that is Euclidean for the norm.

Joint work with Nick Ramsey shows that these are indeed all the Euclidean ideals in quadratic imaginary fields.