

1145-11-33

**Benedict H. Gross\*** ([gross@math.harvard.edu](mailto:gross@math.harvard.edu)), 142 N Rios Ave, Solana Beach, CA 92075.

*Complex multiplication: past, present, future.*

The theory of complex multiplication, which studies both the arithmetic of elliptic curves and orders in imaginary quadratic fields, has a distinguished history. In the first lecture, I will recall the roots of this theory, starting with the ideas of Euler, Lagrange, and Gauss. I will review the main results obtained in the nineteenth century, and will end with a discussion of Heegner's paper on the class number one problem. (Received June 27, 2018)