

1125-11-435

Irene Bouw, Jenny Cooley, Elisa Lorenzo-Garcia, Kristin Lauter and Michelle Manes*
(mmanes@math.hawaii.edu), Department of Mathematics, 2565 McCarthy Mall, Keller 401A,
Honolulu, HI 96813, and **Rachel Newton and Ekin Ozman**. *Bad reduction of genus 3 curves
with Complex Multiplication.*

Let C be a smooth, absolutely irreducible genus 3 curve over a number field M . Suppose that the Jacobian of C has complex multiplication by a sextic CM-field K . Suppose further that K contains no imaginary quadratic subfield. We give a bound on the primes \mathfrak{p} of M such that the stable reduction of C at \mathfrak{p} contains three irreducible components of genus 1. (Received September 04, 2016)