

1116-11-1349

Michelle A Manes* (mmanes@math.hawaii.edu), University of Hawaii Dept. of Mathematics, 2565 McCarthy Mall, Keller 401A, Honolulu, HI 96822, and **Katherine E Stange**. *Characterizing cyclic quartic extensions by automorphism polynomials*. Preliminary report.

Following Morton's work with cyclic cubic extensions, we use the dynamics of a family of cubic polynomials to characterize the cyclic quartic extensions of a field K , provided that K has characteristic different from 2 and 3. (Received September 18, 2015)