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Jennifer Paulhus* (paulhus@math.ksu.edu), Department of Mathematics, Kansas State University, 138 Cardwell Hall, Manhattan, KS 66506-2602. *Elliptic factors in the Jacobian varieties of low genus curves.*

Given a curve X with automorphism group G , idempotent relations in $\mathbb{Q}[G]$ may lead to decompositions of the Jacobian variety of X . Using these decompositions, we can generate curves of low genus whose Jacobians have many isogenous elliptic curves as factors. We discuss these decompositions, the elliptic curve factors, and some interesting consequences. (Received September 20, 2007)