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**Title:** Central simple representations and superelliptic jacobians

**Abstract.** Let  $f(x)$  be a polynomial of degree at least 5 with complex coefficients and without repeated roots. Suppose that all the coefficients of  $f(x)$  lie in a subfield  $K$  such that :

1.  $K$  contains a primitive  $p$ -th root of unity ;
2.  $f(x)$  is irreducible over  $K$  ;
3. the Galois group  $\text{Gal}(f)$  acts doubly transitively on the set of roots of  $f(x)$  ;
4. the index of every maximal subgroup of  $\text{Gal}(f)$  does not divide  $\deg(f) - 1$ .

Then the endomorphism ring of the Jacobian of the superelliptic curve  $y^p = f(x)$  is isomorphic to the  $p$ -th cyclotomic ring for all primes  $p > \deg(f)$ . We outline the proof, which is based on ideas from representation theory.