

Decomposing Jacobian Varieties

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A group acting on a curve may be leveraged to produce a decomposition of the Jacobian variety of that curve, and computations of these decompositions in certain cases have led to interesting results. But group actions alone will not tell us the whole story of how all Jacobian varieties decompose. We will highlight known computational techniques to decompose a Jacobian variety using a group action, and then discuss progress in the cases where there is no group action, or the group action does not produce the full decomposition.