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Amod Agashe* (agashe@math.fsu.edu), Department of Mathematics, Florida State Univ, 208 Love Building, 1017 Academic Way, Tallahassee, FL 32306. *A formula for the special L-value of a modular abelian variety.*

We will describe a formula that expresses the the ratio of the special L-value to the real volume of a modular abelian variety as a lattice index of a certain group in another. The Birch and Swinnerton-Dyer conjecture expresses this ratio in terms of the orders of certain arithmetic groups associated to the abelian variety. We will discuss how our formula may be related to an equivariant version of the conjecture. (Received September 20, 2009)