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Audrey Malagon* (malagon_al@mercer.edu), Dept. of Mathematics, Mercer University, 1400 Coleman Ave., Macon, GA 31207. *Killing Forms of Isotropic Lie Algebras.*

This paper presents a method for computing the Killing form, a quadratic form invariant, of an isotropic Lie algebra defined over an arbitrary field. The method is based on the Killing form of a subalgebra containing its anisotropic kernel. This approach allows for streamlined formulas for many exceptional Lie algebras of inner and outer type E6 and type E7 and yields a unified formula for all Lie algebras of inner type E6, including the anisotropic ones. (Received February 15, 2010)