

1046-17-72

Audrey Malagon* (amalago@emory.edu), Math & Science Center, 400 Dowman Dr, W401,
Atlanta, GA. *Killing Forms of Lie Algebras*.

One approach to the problem of classifying Lie algebras is to find invariants. One such invariant is the Killing form. In this talk I will give a formula for computing the Killing form of an isotropic Lie algebra defined over an arbitrary field of characteristic zero, based on the Killing form of a subalgebra containing its anisotropic kernel. I will then explicitly compute the Killing form for several Lie algebras of exceptional type and give a general formula for the Killing form of all inner type Lie algebras of type E_6 , including the anisotropic ones. (Received August 26, 2008)