

Anosov automorphisms on nilmanifolds

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Abstract

Nilmanifolds admitting Anosov automorphisms play an important role in the theory of dynamical systems. These nilmanifolds correspond to Anosov Lie algebras of which few examples were known. We will discuss a combinatorial method using graphs of constructing Anosov Lie algebras. We will also describe some recent examples constructed using algebraic number theory.