

ON THE RICCI CURVATURE OF NONUNIMODULAR SOLVABLE METRIC LIE ALGEBRAS OF SMALL DIMENSION

M. S. Chebarykov

The Ricci curvature of solvable metric Lie algebras is studied. In particular, we prove that the Ricci operator of any metric nonunimodular solvable Lie algebra of dimension not exceeding 6 has at least two negative eigenvalues, that generalizes the known results.

Key words and phrases: homogeneous Riemannian manifold, Lie algebra, Lie group, left-invariant Riemannian metric, the Ricci curvature.

Chebarykov Mikhail Sergeevich
Rubtsovsk Industrial Institute,
Rubtsovsk, 658207 Russia.
E-mail: chebarikov@yandex.ru

Received
June 1, 2009

Translated into English:

Siberian Advances in Mathematics, V. 21, N 2, 81–99 (2011).