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**David A Richter\*** ([drichter@semovm.semo.edu](mailto:drichter@semovm.semo.edu)), David Richter, Mathematics Dept, mailstop 6700, Southeast Missouri State University, Cape Girardeau, MO 63701. *Lie superalgebra bundles over Riemannian manifolds.*

First, a coincidence between holonomy groups for Riemannian manifolds and a particular class of Lie superalgebras is exhibited. Second, in an attempt to explain this coincidence, Lie superalgebra bundles are constructed over Riemannian manifolds which satisfy various strong and weak forms of constant curvature. In particular, the usual structural equations of a Riemannian manifold  $(M, g)$  along with these various conditions of constant curvature can all be reformulated by requiring that there exist a particular Lie superalgebra bundle over  $M$ . (Received September 05, 2000)