
RAY MCLENAGHAN, University of Waterloo, Department of Applied Mathematics, Waterloo, Ontario N2L 3G1
Symmetry operators for the Dirac equation on 2-dimensional Riemannian spin manifolds

The second-order symmetry operators for the Dirac equation on 2-dimensional Riemannian spin manifolds are determined in terms of Killing vectors and valence two Killing tensors defined on the underlying manifold. The role of these operators in the theory of separation of variables for the Dirac equation is described.

Joint work with Lorenzo Fatibene, Giovanni Rastelli, and Shane Smith.