

Molchanov, V. F.**Orbits of an isotropy subgroup on a pseudo-Riemannian symmetric space of rank 1.** (English. Russian original) [Zbl 0536.53049](#)

Russ. Math. Surv. 38, No. 5, 158-159 (1983); translation from Usp. Mat. Nauk 38, No. 5(233), 203-204 (1983).

The description of orbits of a connected open subgroup $H \subset G^\sigma \subset G$ on a pseudo-Riemannian symmetric space G/H of rank 1 is given. Here the subgroup G^σ consists of elements of a real semi-simple Lie group G fixed with respect to the involution σ . The author uses some ideas of *T. Oshima* and *T. Matsuki* [*J. Math. Soc. Japan* 32, 392-414 (1980; [Zbl 0451.53039](#))] who considered the action of H on G/G^σ . Additionally, the author considers the averaging of functions from $C_0^\infty(G/H)$ by H and points out the corresponding radial part of the Laplace-Beltrami operator.

Reviewer: [B.N.Apanasov](#)**MSC:**[53C35](#) Differential geometry of symmetric spaces[53C50](#) Global differential geometry of Lorentz manifolds, manifolds with indefinite metrics[57S15](#) Compact Lie groups of differentiable transformations**Keywords:**

isotropy group; symmetric space; semi-simple Lie group; Laplace-Beltrami operator

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