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ESTIMATES FOR THE POISSON KERNELS ON HOMOGENEOUS MANIFOLDS OF NEGATIVE CURVATURE AND THE BOUNDARY HARNACK INEQUALITY IN THE NONCOERCIVE CASE

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Abstract: Using a probabilistic technique we obtain upper and lower estimates for the Poisson kernels of the second order differential operators on a homogeneous manifold of negative curvature. Our results improve estimates obtained in the paper [5]. Moreover, for the noncoercive operator we proved the boundary Harnack inequality which turned out to be the same as in the coercive case.

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