

A SUPPORT THEOREM FOR THE GEODESIC RAY TRANSFORM ON REAL-ANALYTIC RIEMANNIAN MANIFOLDS

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We consider the geodesic ray transform on a compact simple Riemannian manifold with boundary and with a real-analytic Riemannian metric. Using analytic microlocal analysis, we prove a support theorem for this transform in the spirit of Helgason's support theorem for the Radon transform.