Sogge, Christopher D.; Zelditch, Steve
Focal points and sup-norms of eigenfunctions.  (English) Zbl 1361.32011

For a compact real analytic Riemannian manifold \((M, g)\), the authors define self-focal dissipative points and discuss some of their properties. If \(\dim M \geq 2\), each self-focal point is dissipative if and only if there exists a certain sequence of quasimodes of order \(o(\lambda)\) satisfying sup-norm estimates. Some further ways to improve these results are also presented.

Reviewer: Eugen Pascu (Montréal)

MSC:
32C05 Real-analytic manifolds, real-analytic spaces
58J50 Spectral problems; spectral geometry; scattering theory on manifolds
35P20 Asymptotic distributions of eigenvalues in context of PDEs

Keywords:
eigenfunctions; self-focal dissipative points; \(L^\infty\) bounds

Full Text: DOI arXiv

References:


Zelditch, S.: CBMS Lectures (to appear). · Zbl 0946.58024

This reference list is based on information provided by the publisher or from digital mathematics libraries. Its items are heuristically matched to zbMATH identifiers and may contain data conversion errors. It attempts to reflect the references listed in the original paper as accurately as possible without claiming the completeness or perfect precision of the matching.