ABSTRACTS 1.2



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 $L^p$  bounds for eigenfunctions for Lipschitz metrics

I will discuss recent joint work with H. Koch and D. Tataru towards establishing  $L^p$  bounds on spectrally localized functions on compact manifolds with low-regularity metrics. It is known by examples that the spectral cluster estimates of Sogge fail for metrics that are less regular than  $C^2$ . In our work we obtain estimates for the case of Lipschitz metrics which, while likely not sharp, improve substantially on known bounds.