
*Workshop dedicated to the memory of Professor Gabriela Kohr
(3rd edition)*

Geometric Function Theory in Several Complex Variables and Complex Banach Spaces

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Bourgain's $\Lambda(p)$ -set problem for curved hypersurfaces

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Abstract

We construct exponential sums with frequencies supported on curved manifolds in Euclidean space, that exhibit high order square root cancellation. The method combines curvature with Bourgain's probabilistic approach from his famous $\Lambda(p)$ -set paper.