Measure doubling for small sets in $SO(3,R)$

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Time: September 25th, 14:00 - 15:00
Zoom meeting ID: 897 7119 3045   Password: 121323
Link: https://zoom.com.cn/j/897 7119 3045
Venue: Room 106, Shanghai Center for Mathematical Sciences

Abstract:

Let $SO(3,R)$ be the $3D$-rotation group equipped with the real-manifold topology and the normalized Haar measure μ. Confirming a conjecture by Breuillard and Green, we show that if A is an open subset of $SO(3,R)$ with sufficiently small measure, then $\mu(A^2) > 3.99\mu(A)$. This is joint work with Chieu-Minh Tran (NUS) and Ruixiang Zhang (Berkeley).