

## Local Mixing of Diagonal Flows on Anosov Homogeneous Spaces

*Tuesday, June 20, 2023 1:30 PM (1 hour)*

For convex cocompact (and more generally, geometrically finite) rank one locally symmetric spaces, Winter proved mixing of the frame flow with respect to the Bowen-Margulis-Sullivan measure. Mixing results in homogeneous dynamics have many applications in counting, equidistribution, and decay of matrix coefficients. For Anosov subgroups of higher rank Lie groups, the analogous Bowen-Margulis-Sullivan measures are infinite and one looks for local mixing. In a joint work with Michael Chow, we prove local mixing of one-parameter diagonal flows on Anosov homogeneous spaces, generalizing the result of Winter. We also discuss some applications including a recent result of Chow-Fromm regarding joint equidistribution of maximal flat cylinders and holonomies.

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