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Quantitative multiple pointwise ergodic theorem

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<u>Abstract</u>

The multiple pointwise ergodic theorem is a generalization of the Birkhoff ergodic theorem. The question is initiated by Hill Furstenberg who proved multiple recurrence. Although, there are many cases known, the general question is still open.

We show that effective multiple correlations imply quantitative multiple pointwise ergodic theorem. This result can be applied to subgroup actions on homogeneous spaces, nilmanifold automorphisms and symbolic dynamical systems with Gibbs measure.

> Date: 30 January 2018 (Wednesday)
> Time: 4:00pm - 5:00pm
> Venue: Room 219, Lady Shaw Building, The Chinese University of Hong Kong, Shatin

> > All are Welcome