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## Topological Wiener-Wintner ergodic theorem with polynomial weights

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## <u>Abstract</u>

For a totally uniquely ergodic dynamical system, we prove a topological Wiener-Wintner ergodic theorem with polynomial weights under the coincidence of the quasi discrete spectrums of the system in both senses of Abramov and of Hahn-Parry. The result applies to ergodic nilsystems. Fully oscillating sequences can then be constructed on nil manifolds.

Date: 04 August 2017 (Friday)
Time: 2:30pm – 3:30pm
Venue: Room 222, Lady Shaw Building The Chinese University of Hong Kong, Shatin

All are Welcome