

# NYC Dynamics Seminar at CUNY & Yeshiva University

---

**Livio Flaminio** (University of Lille)

*will speak on*

## **Algebraic Actions of the Discrete Heisenberg Group**

---

**Wednesday, April 5th, 5:00pm**

Lectures will last 1 hour and be followed by questions and/or discussion.

**Yeshiva University, 215 Lexington Ave, Room 506**

On the SW corner of Lexington Ave and 33rd Street. You will need to sign in.

---

*Abstract:*

We prove that any ergodic affine unipotent diffeomorphisms of a compact nil-manifold enjoys the property of asymptotically orthogonal powers (AOP). Two consequences follow:

- (i) Sarnak's conjecture on Möbius orthogonality holds in every uniquely ergodic model of an ergodic affine unipotent diffeomorphism;
- (ii) For ergodic affine unipotent diffeomorphisms themselves, the Möbius orthogonality holds on so called typical short intervals.

This is joint work with K. Fraczek, J.Kulaga-Przymus and M. Lemanczyk.

---

Seminar website: <http://nycdynamics.org/>