

# NYC Dynamics Seminar at CUNY & Yeshiva University

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**Anton Solomko** (University of Bristol)

*will speak on*

## **On rank and isomorphism of von Neumann special flows**

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**Wednesday, April 26th, 5:00pm**

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

**CUNY Graduate Center, 365 5th Ave, Room 4419**

The room is on the 4th floor. You will need to sign in.

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*Abstract:*

A von Neumann flow is a special flow over an irrational rotation of the circle and under a piecewise smooth roof function with a non-zero sum of jumps. Such flows appear naturally as special representations of Hamiltonian flows on the torus with critical points. We consider the class of von Neumann flows with one discontinuity. I will show that any such flow has infinite rank and that the absolute value of the jump of the roof function is a measure theoretic invariant. The main ingredient in the proofs is a Ranter type property of parabolic divergence of orbits of two nearby points in the flow direction. Joint work with Adam Kanigowski.