

**GENERALIZED WREATH PRODUCTS AND RIGIDITY OF  
THEIR VON NEUMANN ALGEBRAS**

**Fudan Topology Seminar**

**Speaker: Bin Sun**

**Oxford University**

**Time: Thur, Jun. 9th, 15:00-17:00**

**Zoom meeting ID: 956 0945 4208**

**Passcode: hyperbolic**

**Abstract:** We construct the first positive examples to the Connes' Rigidity Conjecture, i.e., we construct groups  $G$  with Kazhdan's property (T) such that if  $H$  is a group with the same von Neumann algebra as  $G$ , then  $H$  is isomorphic to  $G$ . In this talk, I will focus on the group theoretic side of this result and talk about how we applied geometric group theory to solve problems from von Neumann algebra.