



## **Seminar Title**

**“Graphs, stable permutations, and Cuntz algebra automorphisms”**

**Speaker: Prof. Francesco Brenti. (University of Rome, Italy)**



**Date/Time: Monday October 10, 2022**

**4:00 PM - 5:00 PM**

### **Abstract**

Stable permutations are a class of permutations that arise in the study of the automorphism group of the Cuntz algebra. In this talk I will define stable permutations, explain the connection to the automorphisms of the Cuntz algebra, and describe the main results known about them. I will then present a characterization of stable permutations in terms of certain associated graphs. As a consequence of this characterization I will prove a conjecture in [Advances in Math, 381(2021) 107590], and I will characterize explicitly stable 4 and 5-cycles. This is joint work with Roberto Conti and Gleb Nenashev.attached to Galois representations (of number theoretical nature) and one to automorphic representations (of representation theoretical nature).