Professor Vikram Mehta  
Indian Institute of Technology, Bombay  

The fundamental group schemes and some open questions  
3:00 – 4:00pm  

Abstract  
I will survey some recent results on the different fundamental group schemes in algebraic geometry, starting with the foundational work of M. Nori.

Professor Giovanna Carnovale  
Università di Padova  

Sheets of conjugacy classes  
4:00 – 5:00pm  

Abstract  
The sheets for an action of an algebraic group $G$ on a variety $X$ are the irreducible components of the locally closed subsets of $X$ consisting of points whose orbit has a prescribed dimension. Sheets for the adjoint action of $G$ on $X = \text{Lie}(G)$ have been parameterized and described by Borho and Kraft. We will list some representation theoretic motivations for studying sheets of conjugacy classes and we will provide an analogue of Borho and Kraft's results in this setting. This talk is based on joint work with F. Esposito.