Thursday, February 7th, 11:00
BCAM Leioa – UPV/EHU Campus

Yongqiang Liu (KU LEUVEN)

MINI-COURSE ON PERVERSE SHEAVES AND THE DECOMPOSITION THEOREM | 2nd session

Perverse sheaves are fundamental objects at the crossroad of algebraic topology and algebraic geometry, with important applications in representation theory and combinatorics. In this mini-course, I will provide an introduction to perverse sheaves and decomposition theorem.

**Course contents:** constructible complex of sheaves, support and co-support condition for perverse sheaves, simple perverse sheaves, BBD decomposition theorem. If time allows, I will also explain my recent joint work with Laurentiu Maxim and Botong Wang for perverse sheaves on semi-abelian varieties. This is a joint work with Nero Budur and Botong Wang.