CHROMATIC HOMOTOPY, K-THEORY AND FUNCTORS

CIRM, LUMINY, 23-27.01.2023

WEDNESDAY 10:20 – 11:20, **Andrew Putman** (University of Notre Dame):

A new approach to twisted homological stability.

There is a vast literature proving that for various sequences of groups G_n, the homology groups $H_k(G_n)$ are independent of n once n is sufficiently large. The groups G_n here can be for instance symmetric groups, general linear groups, automorphism groups of free groups, etc. This phenomenon is known as "homological stability". Dwyer showed how to incorporate certain twisted coefficients into these proofs. For instance, his techniques imply that $H_k(SL(n,\mathbb{Z});\mathbb{Z}^n)$ satisfies homological stability. I will explain a new approach to twisted homological stability that is in many ways closer to the usual untwisted story.