The topological structure of Chow varieties

Wenchuan Hu
Massachusetts Institute of Technology

I will discuss the homotopy theoretic methods in the algebraic cycles theory and their applications to Chow varieties. In particular, we will talk about an elementary proof of Lawson-Yau formula on the Euler characteristic as well as its generalization.

We also compute some homotopy and homology groups of Chow varieties. This leads to a negative answer to a question of Lawson-Michelsohn on algebraic cycles of a fixed degree in complex projective spaces.

Tuesday October 28th
3:00 p.m.
Harvard (SC 507)