
ARNAB KUNDU, University of Toronto

Gersten's injectivity in the non-Noetherian world

Gersten's conjecture predicts that the K-groups of a regular local ring can be calculated by an exact sequence involving the K-groups of its residue fields. As a consequence, we may relate the K-groups of such a ring to its respective Chow groups. In this talk, we report some partial positive results to affirm the predicted injectivity part of this conjecture in a possibly mixed characteristic, non-Noetherian setting. Namely, we give evidence to show that the K-groups of an integral domain that arises as a localisation of a smooth algebra over an equi-characteristic valuation ring of rank 1 inject inside the respective K-groups of its fraction field.