

The Role of Residues in Computational Algebra

Carlos A. Berenstein

Institute for Systems Research, University of Maryland, College Park, MD 20742, USA
`carlos@Glue.umd.edu`

The lecture will touch on the construction of residue currents in the spirit of the work of Sato-Bernstein on D-modules. The new identities found by this method and their applications to the effective Nullstellensatz and the construction of Arakelov currents.