

Multiplicity Operators

DMITRY NOVIKOV

(in collaboration with G. Binyamini (University of Toronto))

Department of Mathematics, Weizmann institute of Science, Rehovot, Israel

Multiplicity operators provide a way to formulate an explicit quantitative version of a statement "a perturbation of a mapping of multiplicity k at the origin has no more than k zeros in a small ball around the origin". I will define the multiplicity operators, describe their properties and indicate some applications, notably an effective upper bound on a deficiency of non-isolated intersection of Noetherian functions.