

**“SIGNIFICANT” IMPACT OF “INSIGNIFICANT” NONLINEARITY ON THE
BEHAVIOR OF THE SOLUTIONS OF ONE CLASS OF SINGULAR ELLIPTIC
SYSTEMS IN THE NEIGHBORHOOD OF SINGULARITY**

Giorgi Makatsaria*, Ia Ramishvili**, Tamaz Vekua**,

*Saint Andrew The First Called Georgian University of Patriarchate of Georgia,
Tbilisi, Georgia, giorgi.makatsaria@gmail.com

**Georgian Technical University, Tbilisi, Georgia

A sufficiently wide class of singular two-dimensional elliptic nonlinear systems is studied. We assume that their nonlinearity is “insignificant” since the corresponding coefficient is very small. This “insignificant” nonlinearity causes the significant change of the structure of the solutions of the system in the neighborhood of singularity; in particular, for the system there appears the sufficiently wide class of the solutions with power asymptotics whereas it is well known that for the linear systems the same fact doesn't hold.