
VITALI VOUGALTER, University of Toronto

Existence of stationary solutions for some integro-differential equations with the double scale anomalous diffusion

The work is devoted to the investigation of the solvability of an integro-differential equation in the case of the double scale anomalous diffusion with a sum of two negative Laplacians in different fractional powers in R^3 . The proof of the existence of solutions relies on a fixed point technique. Solvability conditions for the elliptic operators without the Fredholm property in unbounded domains are used.