

# On a fractional quadratic integral equation

by

Mohamed Abdalla DARWISH

Department of Mathematics, Alexandria University at Damanhour,  
22511 Damanhour, Egypt  
darwishma@yahoo.com

**Abstract:** We study the solvability of a quadratic integral equation of fractional order. This equation is considered in the Banach space of real functions which are defined, bounded and continuous on an unbounded interval. Moreover, we will obtain some asymptotic characterization of solutions. Our proof depends on a suitable combination of the technique of measures of noncompactness and the Darbo fixed point theorem. Finally, we give an example to illustrate our abstract results.