**Khachatryan, Khachatur A.**

**On positive solutions of one class of nonlinear integral equations of Hammerstein-Nemytskiĭ type on the whole axis.** (English. Russian original) Zbl 1320.45001

Trans. Mosc. Math. Soc. 2014, 1-12 (2014); translation from Tr. Mosk. Mat. O.-va 75, No. 1, 1-14 (2014).

Summary: This paper is devoted to studying one class of nonlinear integral equations of Hammerstein-Nemytskiĭ type on the whole axis, which occurs in the theory of transfer in inhomogeneous medium. It is proved that these equations can be solved in various function spaces, and the asymptotic behaviour at infinity of the solutions that are constructed is studied.

**MSC:**

45G10 Other nonlinear integral equations
45M20 Positive solutions of integral equations

**Keywords:**

positive solution; Carathéodory condition; convergence of iterations; monotonicity; inhomogeneous medium; Hammerstein-Nemytskiĭ equation

**Full Text:** DOI

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