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Existence of solutions and bifurcation points to Hammerstein equations with essentially bounded kernel. (English) Zbl 1067.45001

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This paper deals with an existence theorem of solutions and of bifurcation points for the Hammerstein integral equation

$$u(x) = \lambda \int_{\Omega} k(x, y) f(y, u(y)) dy,$$

where $\lambda \in \mathbb{R}$, Ω is a Lebesgue measurable subset of \mathbb{R}^n , $k \in L^{\infty}(\Omega \times \Omega)$ and $f : \Omega \times \mathbb{R} \rightarrow \mathbb{R}$ is a Carathéodory function. The proofs rely on the Tychonoff fixed point theorem.

Reviewer: [Mouffak Benchohra \(Sidi Bel Abbes\)](#)

MSC:

45G10 Other nonlinear integral equations

Cited in 1 Document

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