An extension of Krasnoselski theorem in local bifurcation theory

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ABSTRACT.

We give a local bifurcation result concerning the semilinear equation $x = \mu Lx + N(\mu, x)$ in a Banach space X, where L is linear, compact selfadjoint operator and the nonlinearity $N(\mu, \cdot)$ is compact, satisfying some boundedness conditions which are weaker than those from Krasnoselski theorem or than the usual uniform boundedness condition.

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