
THE SURJECTIVITY OF SOME NONLINEAR WEAKLY COERCIVE MAPPINGS

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A weakly coercive mapping between normed space is a mapping f such that $\|f(x)\| \rightarrow \infty$ when $\|x\| \rightarrow \infty$. We present various sufficient conditions for the surjectivity of various classes of such mappings, including those of the form $L + g$, where L is a linear Fredholm mapping of index zero and g is L -compact. The question of a direct Galerkin-type proof of a such a surjectivity result for monotone-like mappings is also discussed.

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