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Bolzano's theorem in infinite dimensional Banach spaces

by

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Abstract

In this talk we will study existence results for zeros of a mapping on a Banach space. In this sense, we will obtain a generalization of the well-known Bolzano-Poincaré-Mirandas theorem to infinite dimensional Banach spaces. Finally, we will give a result on the existence of periodic solutions to a differential equation posed in an arbitrary Banach space.