Properties of monotone operators. Applications

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Abstract

In this talk we first present two properties of Minty-Browder monotone operators followed by a series of applications. We pay some special attention to the global injectivity results obtained out of the mentioned properties. Using a geometric property of the Minty-Browder monotone operators we next extend this class to the class of h-monotone operators. One of the properties of the Minty-Browder monotone operators is preserved by the larger class but in a different, still useful, shape. This property of h-monotone operators is used to prove some new global injectivity results.