

Strongly nonlinear multiplicative inequalities with applications to PDEs

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Abstract

The purpose of my talk is to discuss certain family of new inequalities which we call 'strongly nonlinear multiplicative inequalities'. Such inequalities have appeared in the theory of Sobolev spaces and were inspired by techniques of Mazja. Together with inequalities I want to present their applications to PDEs. The talk will be based on my joint works with Jan Peszek and with Tomasz Choczewski.