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**Tomasz Adamowicz\*** (adamowitz@math.uc.edu), 839 Old Chemistry, Cincinnati, OH 45221-0025, and **Peter Hästö**. *Recent developments in nonstandard growth PDEs*.

We generalize  $p$ -harmonic equation to the setting of variable exponent PDEs, obtaining equation with many interesting properties not shared by the other existing nonstandard growth extensions of the  $p$ -Laplacian. Our discussion includes Harnack inequality, the relation between planar mappings of finite distortion and the gradient of solution and the global integrability of  $p(x)$ -supersolutions.

The talk is based on the joint work with Peter Hästö, Oulu University. (Received January 24, 2010)