

SOME LOCAL AND GLOBAL PROPERTIES OF VISCOSITY SOLUTIONS OF ELLIPTIC PDE'S

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ABSTRACT. The aim of the talk is to present some recent results, in collaboration with A. Vitolo (Università di Salerno), concerning viscosity solutions of fully nonlinear elliptic equations of the form $(E)F(x, u(x), Du(x), D^2u(x)) = 0$.

The issues touched are the validity under quite general structure conditions on F of the Alexandrov-Bakelman-Pucci estimate, the boundary weak Harnack inequality and the Krylov-Safonov Growth Lemma.

These tools allow to establish the Weak Maximum Principle for bounded viscosity solutions of equations (E) in general unbounded domains as well as some qualitative Phragmen-Lindelof type theorems.