Helsinki Analysis Seminar, February 23, 2015 Mika Koskenoja, University of Helsinki Abstract

REFLECTION PRINCIPLE FOR VISCOSITY SOLUTIONS OF THE HOMOGENEOUS REAL MONGE–AMPÈRE EQUATION

In the first part of the talk we discuss very basics of viscosity solutions for nonlinear partial differential equations. In the second and main part of the talk we prove that a reflection principle holds for viscosity solutions of the homogeneous real Monge–Ampère equation. Only elementary arguments provided by the concepts of even reflection and viscosity solution are used to obtain the result.