

## Hamilton-Jacobi flows and characterization of solutions of Aronsson equations

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**Abstract.** In this note, we verify the conjecture of Barron, Evans and Jensen [3] regarding the characterization of viscosity solutions of general Aronsson equations in terms of the properties of associated forward and backwards Hamilton-Jacobi flows. A special case of this result is analogous to the characterization of infinity harmonic functions in terms of convexity and concavity of the functions  $r \mapsto \max_{y \in B_r(x)} u(y)$  and  $r \mapsto \min_{y \in B_r(x)} u(y)$ , respectively.

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