

FLUX LIMITED GENERALIZED POROUS MEDIA DIFFUSION EQUATIONS

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Abstract: We study a class of generalized porous media type flux limited diffusion equations and we prove the existence and uniqueness of entropy solutions. We compute the Rankine-Hugoniot condition on the jump set for solutions which are of locally bounded variation in space and time. We give also a geometric characterization of the entropy conditions on the jump set for a restricted class of this type of equations.

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