

# ON THE STRUCTURE OF SOLUTIONS OF MULTIDIMENSIONAL SYSTEMS OF CONSERVATION LAWS

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ABSTRACT. In this talk we first show the existence of weak normal traces of bounded divergence-measure fields on boundaries of sets of finite perimeter. Using these results we then show the existence of strong traces of solutions of multidimensional systems of conservation laws on hyperplanes, assuming a weaker regularity property on the entropy solution  $\mathbf{u} \in L^\infty(\mathbb{R}^{d+1}, \mathbb{R}^m)$ . For the general case, given any set of finite perimeter  $E$ , we show that the weak trace of the vector field  $(\eta(\mathbf{u}), \mathbf{q}(\mathbf{u}))$  on  $\partial^*E$  is indeed strong, for any entropy pair  $(\eta, \mathbf{q})$ .

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