

# HDL OF ASYMMETRIC SYSTEMS

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Hyperbolic scaling of microscopic models is investigated in a regime of shocks. Our main tool is compensated compactness via Lax entropy pairs. Entropies are well controlled in many cases, then we have the Div–Curl lemma and convergence to entropic measure solutions. The empirical process is defined in terms of block averages, and the distribution of an entropy process is tight in the  $D$  space of measures. As consequences we get entropy inequalities (traces) for fix times, whence maximum principles can be derived. Uniqueness of the limit of asymmetric, non-attractive Ginzburg–Landau models is proven. Relaxation schemes of interacting exclusions are also discussed, in the case of a creation - annihilation model the missing LSI is replaced by a relaxation bound; this latter is from a joint work with C. Bahadoran and K. Nagy.