1096-35-1017 **Constantine M. Dafermos*** (constantine_dafermos@brown.edu), Division of Applied Mathematics, Brown University, Providence, RI 02912. *Long Time Behavior of Periodic Solutions to Scalar Conservation Laws In Several Space Dimensions.*

We show that spatially periodic solutions of scalar conservation laws in several space dimensions decay to their time-invariant mean, as time tends to infinity, provided that the flux function is linearly nondegenerate just in the vicinity of the mean and in a countable family of directions. The analysis draws on the basic theory of dynamical systems and the Radon transform on a torus. (Received September 12, 2013)