1033-37-160   **Giovanni Forni*** (`gforni@math.umd.edu`), Department of Mathematics, University of Maryland, Mathematics Building, College Park, MD 20742-4015, and **Jayadev Athreya**. *Speed of ergodicity for rational polygonal billiards.*

We prove polynomial upper bounds for the deviation of ergodic averages for the straight line flow on every translation surface in almost every direction, in particular for those surfaces arising from rational polygonal billiards. (Received September 09, 2007)