SINAI BILLIARDS WITH MOVING SCATTERERS

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Abstract. We propose a model of Sinai billiards with moving scatterers, in which the locations of the scatterers may be shifted by small amounts between collisions. Our main result is the exponential loss of memory of initial data. This can be seen as a prototypical result on the statistical properties of time-dependent dynamical systems. (Joint work with Lai-Sang Young and Hongkun Zhang.)

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Date: June 8, 2012.