Jayadev Siddhanta Athreya* (jathreya@gmail.com), Department of Mathematics, Yale University, Dunham Laboratory, 10 Hillhouse Avenue, New Haven, CT 06511, and Grigory Margulis. Logarithm laws for horocycles and diophantine approximation.

We discuss some recent results on the excursions of horocycle flow on the modular surface into cusps and the relationship to diophantine approximation. (Received August 23, 2008)