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Week 3 (Monday, Oct. 23, 2 pm)

Title: Billiard systems in potential fields

Abstract: Hamiltonian systems with impacts include many interesting problems of the billiard type, such as the Fermi-Ulam system (a particle bouncing between moving walls), the Sinai scatterer (a particle bouncing off a convex scatterer in the field of an attracting potential), etc. Such systems have been studied both from a theoretical dynamics point of view and because of physical applications. We will describe some recent developments for such systems.