On problem 17 in Bowen’s notebook

In his notebook, Bowen left a list of 157 mathematical problems. Among them, problem 17 asks for "symbolic dynamics for billiards".

In this talk, we discuss a joint work with Yuri Lima extending Sarig’s theory of symbolic models for smooth surface diffeomorphisms to the case of surface maps with discontinuities, which includes Sinai and Bunimovich billiards.