## Abstract

Marked length spectrum rigidity asks whether the lengths of closed geodesics marked by homotopy determines the geometry of the space. In this talk, I will explain that this rigidity holds for a generic real analytic Birkhoff billiard with two reflection symmetries. Without the symmetry assumption, we show that the marked length spectrum determine the billiard map up to symplectic conjugacy on part of the phase space. This is based on joint work with Vadim Kaloshin and Martin Leguil.