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We are studying the asymptotic homotopical complexity of a sequence of billiard flows on the 2D unit torus T^2 with n circular obstacles. We get asymptotic lower and upper bounds for the radial sizes of the homotopical rotation sets and, similarly, asymptotic lower and upper bounds for the sequence of topological entropies. The obtained bounds are rather close to each other, so this way we are pretty well capturing the asymptotic homotopical complexity of such systems. Also, we prove the convexity of the admissible rotation set AR , and the fact that the rotation vectors obtained from periodic admissible trajectories form a dense subset in AR .

This is a work in progress, jointly done with Michael Hofbauer-Tsiflakos. (Received June 09, 2019)