1152-55-82 **Michael Farber***, Mile End Road, London, UK, E1 4NS, United Kingdom. *Topological complexity of aspherical spaces.*

Topological complexity is a homotopy invariant reflecting complexity of motion planning algorithms in robotics. In the case when a system has aspherical configuration space its topological complexity depends only on the fundamental group of the configuration space and is a group invariant. Recently a significant progress in understanding of the topological complexity of groups was achieved and I will survey it in my talk. The answer is most transparent in the case of hyperbolic groups. (Received August 25, 2019)