

1154-90-1707 **Laura Sanità*** (lsanita@uwaterloo.ca). *On the hardness of computing the diameter of a polytope.*

The diameter of a polytope P is the maximum length of a shortest path between a pair of vertices on the 1-skeleton of P , which is the graph where the vertices correspond to the 0-dimensional faces of P , and the edges are given by the 1-dimensional faces of P . In this talk we will discuss some hardness results on the complexity of computing the diameter of a polytope, and their connection with a generalized notion of diameter, called circuit-diameter, that has recently gained a lot of attention in the literature. (Received September 16, 2019)