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Viet Dung Nguyen\* (vietdung@math.ac.vn), Institute of Mathematics, Vietnam Academy of Science and Technology, 18 Hoang Quoc Viet road, Cau Giay District, Hanoi, Hanoi 10307, Vietnam, and Van Ninh Nguyen (nguyenninhsp@gmail.com), Department of Mathematics, Thai Nguyen University of Education, 13 Luong Ngoc Quyen, Quang Trung, Thai Nguyen, Thai Nguye, Vietnam. The (higher) topological complexity and hyperplane arrangements. Preliminary report.

Let  $\mathcal{A}$  be a hyperplane arrangement In and  $M(\mathcal{A})$  its complement. In this talk we present our computation for the (higher) topological complexity  $TC_n$  of the complement  $M(\mathcal{A})$  of classes of fiber type and generic hyperplane arrangements as well as of some related spaces. The combinatorially determined property of  $TC_n(M(\mathcal{A}))$  of the complement can also be discussed. Keywords: Higher topological complexity; Motion planing algorithm; Hyperplane arrangements, Schwarz genus. (Received September 07, 2019)