Sections of surface bundles and Lefschetz fibrations (joint work with R. Inanc Baykur and Mustafa Korkmaz)

Naoyuki Monden

Osaka University

Abstract. We will discuss the possible self-intersection numbers for sections of surface bundles Lefschetz fibrations over surfaces, and the (un)boundedness of the number of critical points of a Lefschetz fibration with maximally self-intersecting sections, for fixed fiber and base genera. We will also calculate the stable commutator length of certain elements in the mapping class groups of surfaces with boundary.