

Surfaces in D^4 with the same boundary and fundamental group

Takahiro Oba

Tokyo Institute of Technology

Abstract

This talk is concerned with symplectic surfaces in a symplectic 4-disk bounded by the same transverse link in the standard contact 3-sphere. There are some examples of transverse links (or knots) bounding more than one symplectic surface up to isotopy. All these surfaces can be distinguished by the fundamental groups of their complements. In this talk, I will present a family of pairs of distinct two symplectic surfaces whose boundaries are the same transverse knot and whose complements have isomorphic fundamental groups. To distinguish the two surfaces of each pair, I take double branched covers branched along them.

Date: Tuesday, November 20, 2018

Time: 15:00

Place: IMBM Seminar Room, Boğaziçi University South Campus