XIAMEN UNIVERSITY MALAYSIA
厦門大學馬來西亞分校

Research Talk – XMU-XMUM

RATIONAL SLICE GENUS BOUND AND MINIMAL GENUS PROBLEM

September 27, 2024 (Friday), 3:30–4:30 pm Room A4#G04

Jingling Yang

Assistant Professor

The School of Mathematical Sciences

Xiamen University

Research interests: Low-dimensional topology, knot theory, and the applications of Heegaard Floer homology theory.

Speaker Introduction

Dr. Jingling Yang is an Assistant Professor at the School of Mathematical Sciences at Xiamen University. She obtained her Ph.D. from the Chinese University of Hong Kong under the supervision of Professor Zhongtao Wu. Her research focuses on low-dimensional topology, knot theory, and the applications of Heegaard Floer homology theory.

Abstract

A fundamental problem in low-dimensional topology is to find the minimal genus of embedded surfaces in a 3-manifold or 4-manifold, in a given homology class. Ni and Wu solved a 3-dimensional minimal genus problem for rationally null-homologous knots. In this talk, we will discuss an analogous 4-dimensional minimal genus problem for rationally null-homologous knots. This is a joint work with Zhongtao Wu.