

TOPOLOGY SEMINAR

Guest Speaker: Eduard J.N. Looijenga
Utrecht University

Date: Tuesday, February 15, 2022

Time: 2:30 PM

Location: 258 Hurley Hall

Zoom Link: notredame.zoom.us/j/97262637721



Lecture Title:

Algebraic geometry and topology of generalized Prym representations of mapping class groups.

Abstract

Any finite covering of a closed oriented surface defines an interesting representation of its mapping class group, or rather of a finite index subgroup of it. We are still far from the ultimate goal to describe the image of such a representation. In this talk I will show, using purely topological constructions, that for a large class of coverings of a certain type the image of this representation is arithmetic. But I will begin with spending the first half hour discussing an example in Algebraic Geometry, the Winger pencil, that was first studied by the American mathematician R. Winger (1915).