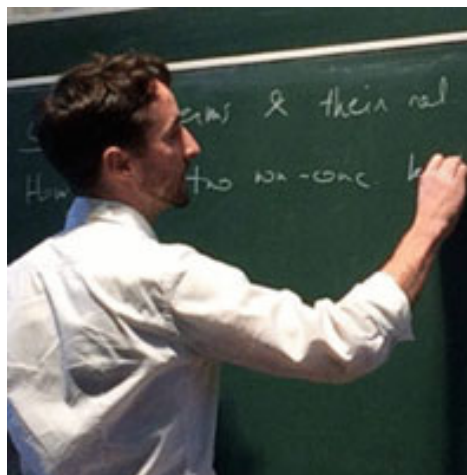


## ***TOPOLOGY SEMINAR***

**Guest Speaker: Marco Golla**  
**Université de Nantes**



**Date:** Tuesday, February 16, 2021

**Time:** 2:30 PM

**Location:** Zoom

**Zoom Link:** [notredame.zoom.us/j/97262637721](https://notredame.zoom.us/j/97262637721)

**Lecture Title:**

**3-manifolds that bound no definite 4-manifold**

**Abstract**

All 3-manifolds bound 4-manifolds, and many constructions of 3-manifolds automatically come with a 4-manifold bounding it. Often times these 4-manifolds have definite intersection form. Using Heegaard Floer correction terms and an analysis of short characteristic covectors in bimodular lattices, we give an obstruction for a 3-manifold to bound a definite 4-manifold, and produce some concrete examples. This is joint work with Kyle Larson.