

# **Combinatorial Floer theory for orientable log symplectic surfaces**

**Charlotte Kirchhoff-Lukat  
(MIT)**

**December 8, 2021  
16:00-17:00h ONLINE via ZOOM  
Analysis & Geometry Seminar, Antwerpen**

On general symplectic manifolds, the definition and computation of Floer cohomology come with a plethora of analytic challenges; however, upon restricting our study to real surfaces, these analytic difficulties go away and the problem becomes fully combinatorial.

In this talk, I will give a survey of the known construction of Lagrangian intersection Floer cohomology for symplectic surfaces, before explaining how to extend the theory to orientable log symplectic surfaces, as classified by Radko.