

Oberseminar Topologie: 24.04.2017

**Joana Cirici (WWU)**

„Formality of symmetric monoidal functors and operads via mixed Hodge theory.“

Abstract:

It has long been observed that Hodge theory is a powerful tool for proving formality results, both in the operadic setting or in the setting of rational homotopy theory. In this talk, I will explain a "purity implies formality" result in the abstract setting of symmetric monoidal functors. I will then develop some applications to both the formality of certain operads defined in the category of complex schemes, and the formality of morphisms of schemes in the sense of rational homotopy. This is joint work with Geoffroy Horel.