

# ON THE HOMOTOPY TYPE OF THE STABLE HARMONIC COMPACTIFICATION

FELIX BOES

Moduli spaces of surfaces have been studied intensively in the last decades. The study of these moduli spaces and of Bødigheimer's harmonic compactification has interesting applications in string topology. In this talk, I present recent joint work with Daniela Egas Santander: We extend the stabilization maps of the moduli spaces to their harmonic compactification. We show that the harmonic compactifications admit homological stability and we obtain results on the homotopy type of the stable harmonic compactification. Moreover, we construct infinite families of non-trivial higher string operations.