## **Topology Seminar**

## Søren Galatius

of Stanford University will be speaking on

## hocolim decomposition of compactified moduli space

on September 15 at 4:30 in MIT Room 2-131

The moduli space of Riemann surfaces M is a classifying space for families of Riemann surfaces. It has a compactification  $\overline{M}$ , which is a classfying space for families of modal Riemann surfaces. A nodal Riemann surface is allowed to have singularities which look like the solutions to zw=0 in complex 2-space. I will describe how to decompose  $\overline{M}$  as a homotopy colimit of spaces which look more like M. Then I will use this to study part of the homology of  $\overline{M}$ , using what is known about the homology of M.