

# Topology Seminar

## Carl-Friedrich Bödigheimer

of Universität Bonn will be speaking on

### Symmetric groups and moduli spaces of surfaces

on November 3 at 4:30 in  
MIT Room 2-131

The symmetric groups  $S_p$  are considered with the norm induced by the word length (with respect to transpositions as generators). This gives a filtration of their classifying spaces. Furthermore, using certain deletion functions  $S_p \rightarrow S_{p-1}$  the family of all symmetric groups can be regarded as filtered simplicial object. we show: in its realization, the stratum for norm equal to  $h$  has several components, each being homoeomorphic to a vector bundle over the moduli space  $M_{g,1}^m$  of genus  $g$  surfaces with one boundary curve and  $m$  punctures (for  $h = 3D2g + m$ ).