

1062-32-62

John H Hubbard and **Sarah C Koch*** (kochs@math.harvard.edu). *An analytic construction of the Deligne-Mumford compactification of $\mathcal{M}_{g,n}$.*

In 1969, Deligne and Mumford created a compactification $\overline{\mathcal{M}}_{g,n}$ of the moduli space $\mathcal{M}_{g,n}$ of curves of genus g with n marked points. The construction is in the language of stacks. In this talk, we outline an analytic construction of $\overline{\mathcal{M}}_{g,n}$, as the quotient of augmented Teichmüller space. (Received July 22, 2010)