

1154-14-1711

**Vance Blankers\*** (blankersv@northeastern.edu). *Descendent Potentials on Hassett Spaces.*

The Deligne-Mumford compactification of  $\overline{\mathcal{M}}_{g,n}$  is often considered the "standard" way to compactify the moduli space of curves. Hassett spaces form a family of alternative compactifications developed in 2002 by Brendan Hassett. In this talk we relate the intersection theory of  $\psi$ -classes on Hassett spaces to the same on  $\overline{\mathcal{M}}_{g,n}$  through an explicit change of variables of their respective generating functions. As a consequence, we are able to use an asymptotic limit of Hassett spaces to establish the Witten conjecture for  $\kappa$ -classes on  $\overline{\mathcal{M}}_g$ , which leads to a recursive method for calculating all  $\kappa$ -class intersection numbers. This is joint work with Renzo Cavalieri. (Received September 16, 2019)