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David Wagner* (dwagner5@wisc.edu), David Wagner, Van Vleck Hall, 480 Lincoln Drive,
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 $H_*(\mathcal{M}_{g,n})$. Preliminary report.

The homology groups $H_i(\mathcal{M}_{g,n})$ are known to eventually stabilize with increasing g when n and i are fixed (Harer stability) as well as with n increasing (due to Hatcher and Wahl). We will present a spectral sequence due to Arinkin and Caldararu having E_2 page given by the alternating homology of $\mathcal{M}_{g,n}$ and which converges to the homology of \mathcal{M}_g . This convergence immediately gives a “skew-stability” theorem; there are eventual isomorphisms on the alternating parts of the symmetric group action $H_i(\mathcal{M}_{g,n})^{\text{Alt}} \xrightarrow{\sim} H_{i+2}(\mathcal{M}_{g,n+1})^{\text{Alt}}$. We will give a geometric description of this isomorphism and a possible relationship with the deformation theory of dg properads. (Received July 16, 2019)