Short geodesics in moduli space.

This talk concerns the moduli space $\mathcal{M}_g$ of Riemann surfaces of genus $g$ equipped with the Teichmüller metric. Given any sufficiently large constant $C$, there are closed geodesics in $\mathcal{M}_g$ of length at most $C/g$. In this talk I will discuss a coarse description for the location of these geodesics in $\mathcal{M}_g$, as well a polynomial upper bound, in terms of $g$, for the number of such geodesics. (Received September 21, 2011)