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**Tao Jing\*** ([jing@math.utah.edu](mailto:jing@math.utah.edu)), Department of Mathematics, University of Utah, 155 S 1400 E Room 233, Salt Lake City, UT 84112, and **Rafi Kasra**. *Diameter of the thick part of moduli space.*

Let  $S$  be a surface of finite type. We study the shape of moduli space of  $S$ . In particular, in either the Teichmüller, Lipschitz, or bi-Lipschitz metric, the diameter of the thick part of moduli space grows like the logarithm of the Euler characteristic of  $S$ . A similar result is true for moduli of graphs (the quotient of Outer space by  $\text{Out}(F_n)$ ). (Received February 17, 2010)