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Milagros Izquierdo* (milagros.izquierdo@liu.se), Department of Mathematics, Linköping University, 581 83 Linköping, Sweden, and **Antonio F Costa** (acosta@mat.uned.es).

Disconnectedness of Singular Loci of Moduli Spaces of Complex Curves.

The moduli space \mathcal{M}_g of compact Riemann surfaces of genus g has the structure of an orbifold and the set of singular points of such orbifold is the *branch locus* \mathcal{B}_g . In this article we study the connectivity of \mathcal{B}_g . More concretely we prove that \mathcal{B}_g is disconnected for $g \geq 26$. In a final remark we present the known information about this problem for genera < 26 . (Received September 02, 2010)