DÉFORMATION LOCALISÉE DE SURFACES DE RIEMANN

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Abstract

Let Y be a Riemann surface with compact boundary embedded into a hyperbolic Riemann surface of finite type X. It is proved that the space of deformations $\mathcal{D}$ of Y into X is an open subset of the Teichmüller space $\mathcal{T}(X)$ of X. Furthermore, $\mathcal{D}$ has compact closure if and only if Y is simply connected or isomorphic to a punctured disk, and $\mathcal{D} = \mathcal{T}(X)$ if and only if the components of $X \setminus Y$ are all disks or punctured disks.