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 $T(X)$ of $X$. Furthermore, $\mathcal{D}$ has compact closure if and only if $Y$ is simply connected or isomorphic to a punctured disk, and $\mathcal{D} = T(X)$ if and only if the components of $X \setminus Y$ are all disks or punctured disks.

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