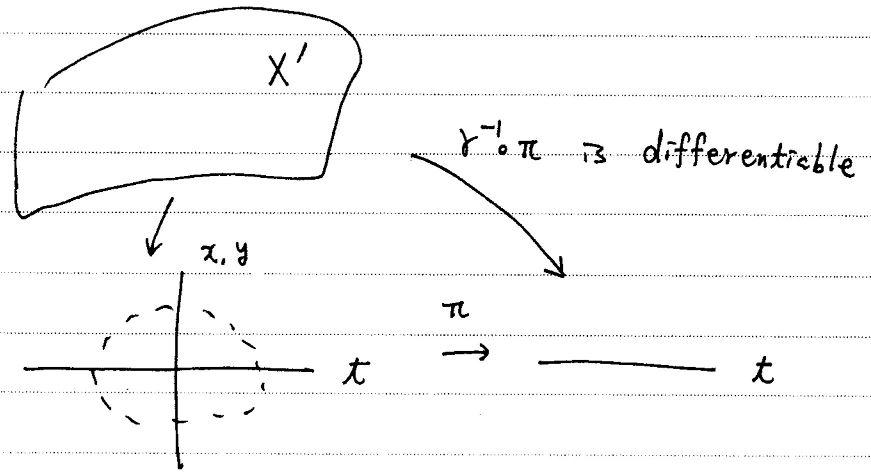

By standard manifold theory, then X' is diffeomorphic to the product $I \times S_0$, and consequently S is diffeomorphic to S_0: since X' is compact and the map $\gamma^{-1}\circ\pi$ is smooth, we can by a partition of unity lift the vector field $-\partial/\partial t$ on I to a vector field v on X'; the flow $\varphi_t = \varphi_t(v)$ on X' will then map $\pi^{-1}(\gamma(t))$ diffeomorphically onto $\pi^{-1}(\gamma(0)) = S_0$.

By the arguments above, for each point $l \in X'$, $\exists$ open set $U_l \ni l$ s.t. $U_l \cong \mathbb{C}^2 \times \mathbb{R}$.

$$(x, y, g(t,x,y), t) \leftrightarrow (x, y, t).$$

$\Rightarrow$ Clearly we can lift the vector field $-\partial/\partial t$ on $\mathbb{R}$ to $\mathbb{C}^2 \times \mathbb{R}$, and we get the lifted vector field on U_l,

$$\begin{array}{ccc} U_l & \xrightarrow{\cong} & \mathbb{C}^2\times\mathbb{R} \\ & \searrow \quad \swarrow & \\ & \mathbb{R} & \end{array} \quad \Rightarrow \quad \begin{array}{ccc} TU_l & \xrightarrow{\cong} & T(\mathbb{C}^2\times\mathbb{R}) \\ & \searrow \quad \swarrow & \\ & T\mathbb{R} & \end{array}.$$

MOOKEUK CO.