

**Proposition 1.** *Let  $M$  be a subset in  $\mathbb{R}^3$ , and let  $p \in M$  be an arbitrary point. Consider a bijective smooth map  $x : U \rightarrow x(U) \subseteq M$  such that  $p \in x(U)$  and  $Dx(u, v)$  has full rank for all  $(u, v) \in U$ . Then  $x^{-1}$  is continuous, and thus  $x$  is indeed a parametrization for  $M$  around  $p$ .*