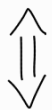


$$\left. \begin{array}{l} \textcircled{2} \quad p: \tilde{X} \rightarrow X \text{ rivestimento} \\ X_0 \subseteq X \\ \tilde{X}_0 = p^{-1}(X_0) \end{array} \right\} \Rightarrow p|_{\tilde{X}_0}: \tilde{X}_0 \rightarrow X_0 \text{ rivestimento}$$

$$p: \tilde{X} \rightarrow X \text{ rivest}$$



$$\textcircled{1} \quad p \text{ suriettiva} \Rightarrow p(\tilde{X}) = X$$

$$\textcircled{2} \quad \forall x \in X, \exists U \subseteq X \text{ aperto}, U \ni x \wedge \exists \{\tilde{U}_j\}_{j \in J} \subseteq \tilde{X} \text{ aperti} \mid$$

$$\left\{ \begin{array}{l} p^{-1}(U) = \bigsqcup_{j \in J} \tilde{U}_j \\ \tilde{U}_j \cap \tilde{U}_k = \emptyset, \forall j, k \in J, j \neq k \\ p|_{\tilde{U}_j}: \tilde{U}_j \rightarrow U \text{ omeomorfismo } \forall j \in J \end{array} \right.$$

$$p \text{ suriettiva} \Leftrightarrow p(p^{-1}(X)) = X$$

$$\left. \begin{array}{l} X_0 \subseteq X \\ \tilde{X}_0 = p^{-1}(X_0) \\ p \text{ suriettiva} \end{array} \right\} \Rightarrow p|_{\tilde{X}_0} \text{ suriettiva}$$

$$\text{Oss 3.1.1} \Rightarrow$$

$$\Rightarrow \forall x_0 \in X_0, \exists V \subseteq X_0 \text{ aperto}, V \ni x_0 \wedge \exists \{\tilde{V}_i\}_{i \in I} \subseteq \tilde{X}_0 \text{ aperti} \mid$$

$$\left\{ \begin{array}{l} p^{-1}(V) = \bigsqcup_{i \in I} \tilde{V}_i \\ \tilde{V}_i \cap \tilde{V}_k = \emptyset, \forall i, k \in I, i \neq k \end{array} \right.$$

$$\begin{aligned}
 & v_j \cap v_k = \varnothing, \quad v_j, v_k \in \mathcal{I}, \quad j \neq k \\
 & p|_{\tilde{V}_i}: \tilde{V}_i \rightarrow V \quad \text{homeomorfismo} \quad \forall i \in I
 \end{aligned}$$

