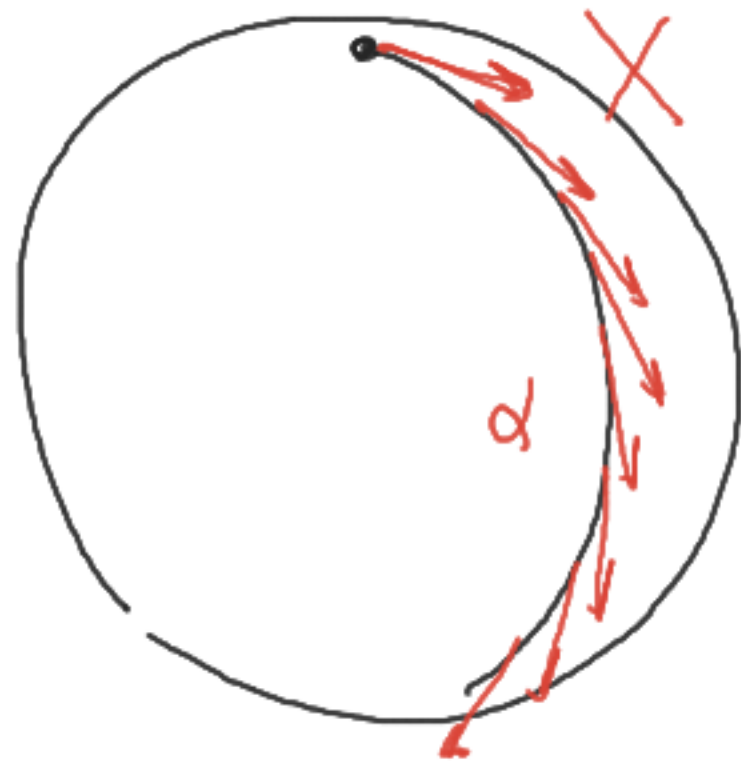
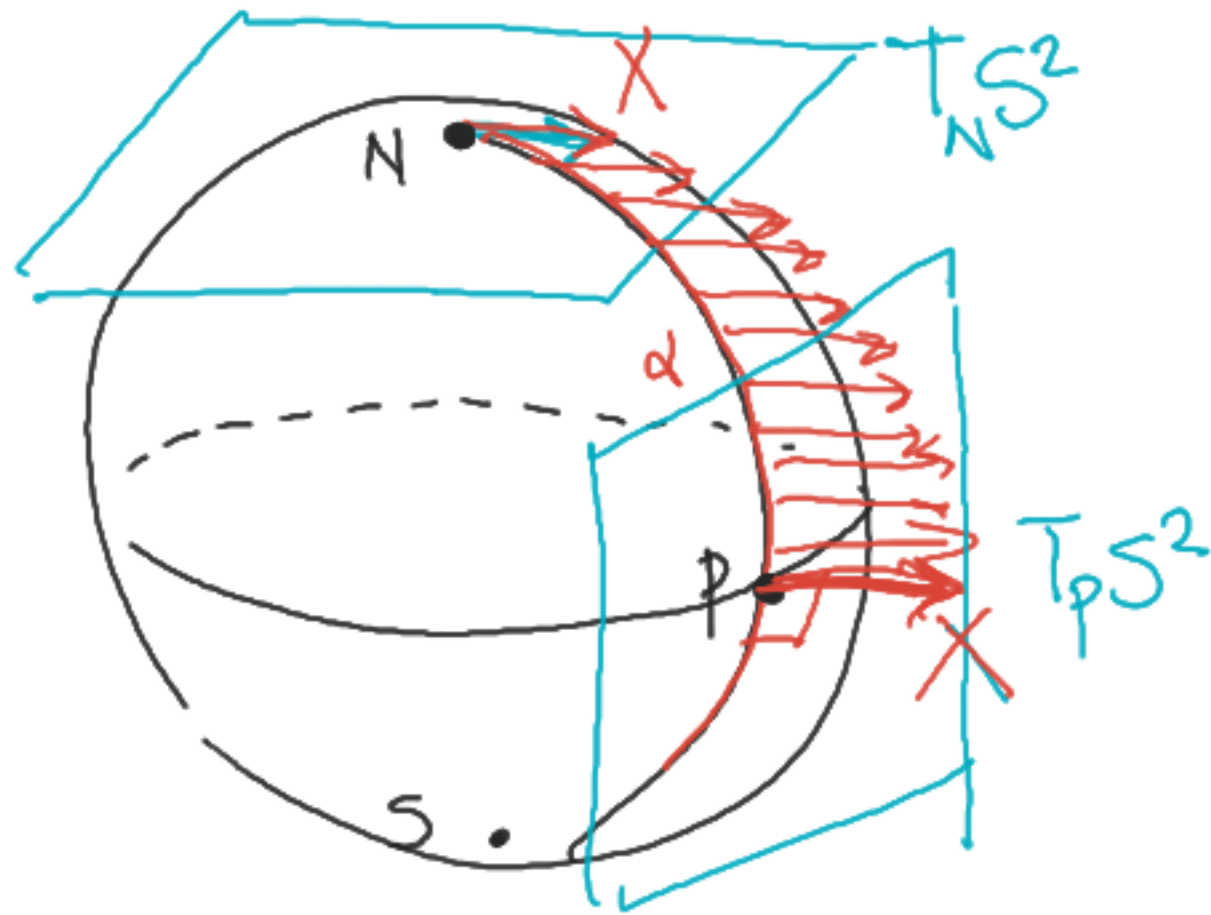
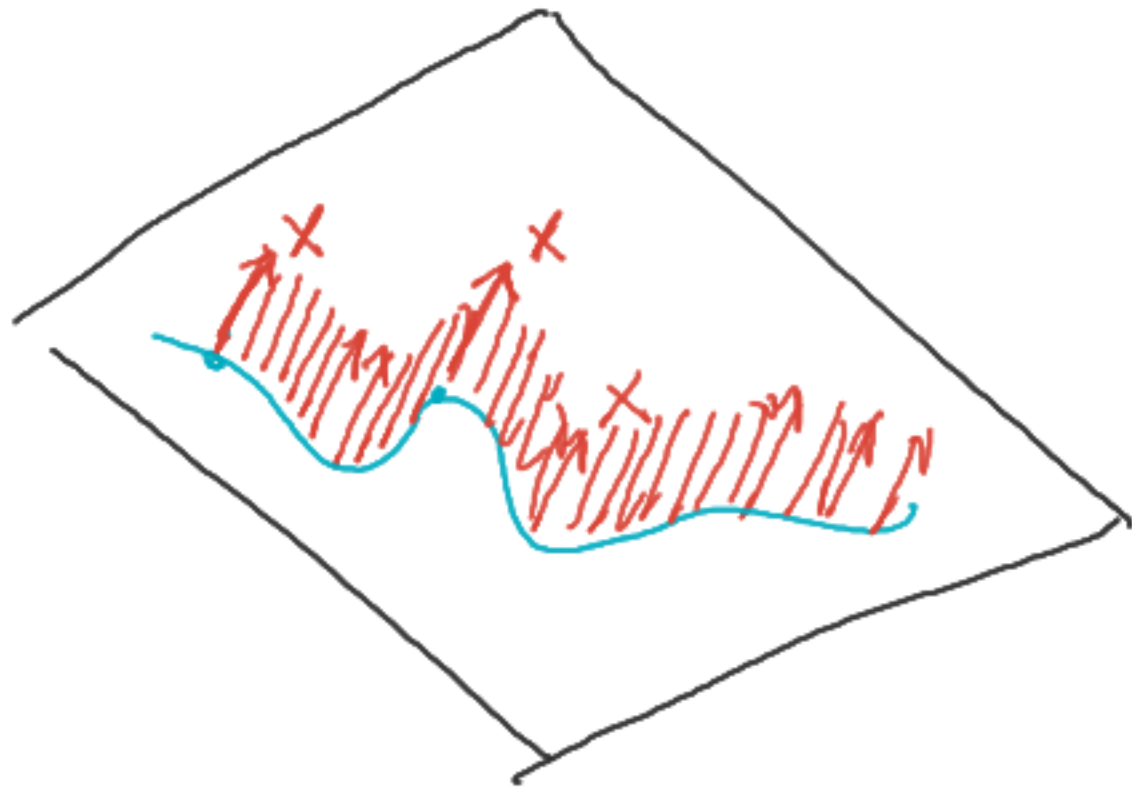
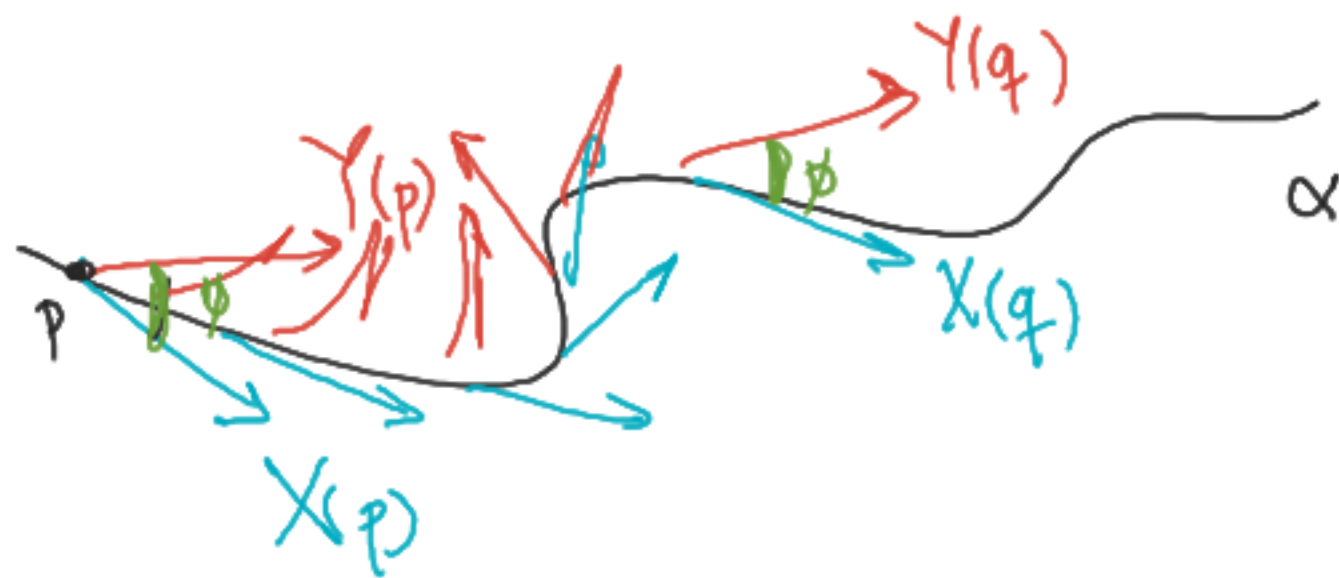


$X$  campo tangente

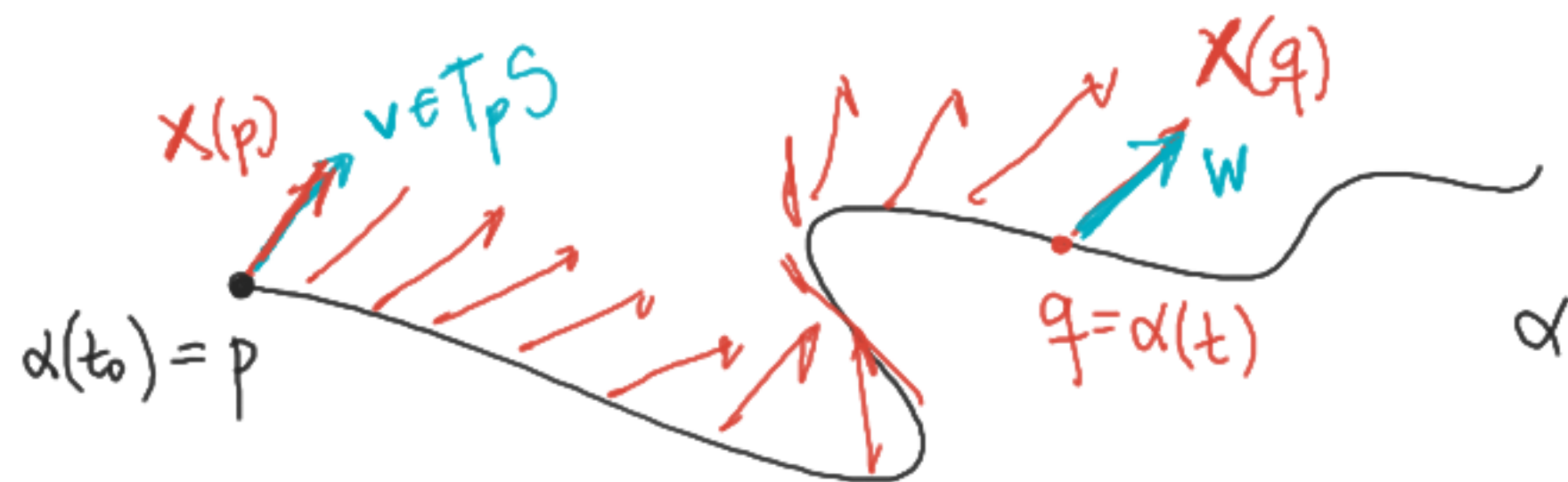
$$X(p) = \sum_{i=1}^n \xi_i(p) \frac{\partial x}{\partial u_i}(p)$$

$X$  diferenciable  $\Leftrightarrow \xi_i(p)$  son diferenciables  $\forall i=1,2,\dots,n$ .



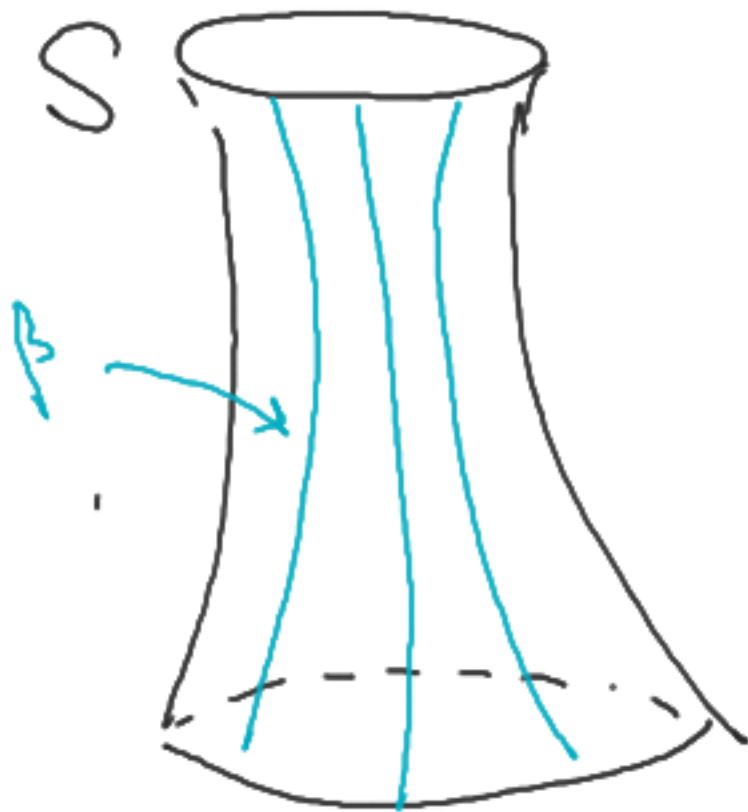
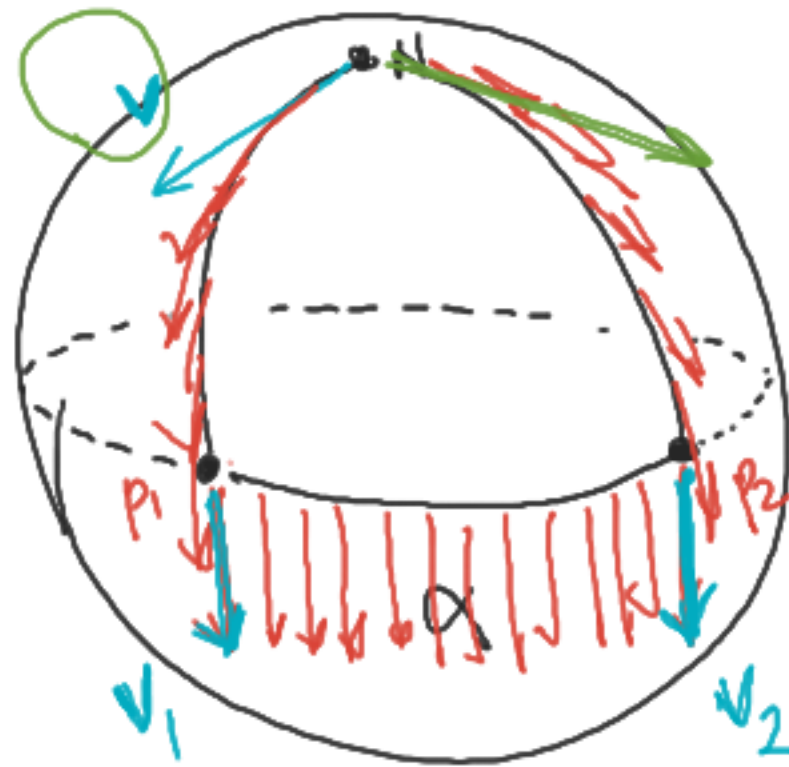


$S$



$S$

Ej:



- Simplex
- complejo simplicial

curvas  
homotópicas