

$\Gamma^k(E) = \text{space of sections.}$

$$\Gamma^0(T(M)) \quad (T(M), M,)$$

\hookrightarrow as a vector bundle.



$$X_t = \frac{\partial}{\partial x_1}$$

$$Y_t = \frac{\partial}{\partial x_2}$$

$$X_t Y_t = \frac{\partial^2}{\partial x_1 \partial x_2}$$

$X_t Y_t$ is not defined.

$$(X_t Y_t) f =$$

Equivalence classes of curves that have the same derivative at a given point.

Curves \rightarrow vectors

Equivalence of pointed derivatives
of curves

check that it satisfies the product rule