

$$\pi: E \rightarrow B \quad C^\infty \Sigma_g\text{-bundle}$$

$$\begin{array}{c} \uparrow \quad \nearrow \\ C^\infty \text{ mfd's} \end{array} \quad \underline{\text{oriented}}$$

$$f: E \rightarrow \mathbb{R} \quad \underline{\text{"generic"}} \text{ fct}$$

$$y \in B$$

$$f_y = f|_{\pi^{-1}(y)}: \pi^{-1}(y) \cong \Sigma_g \rightarrow \mathbb{R}$$

$$\Gamma(f) := \{y \in B \mid f_y \in \Gamma\}$$

- $\Gamma(f)$  is a codim. 2 submfd of  $B$  if  $f$  is generic enough
- $\Gamma(f)$  is co-oriented if  $\pi$  is oriented.