

$$\frac{M \begin{array}{c} + \\ \text{irr} \end{array} \begin{array}{c} \infty \\ \underline{\quad} \end{array} \begin{array}{c} M \\ \underline{\quad} \end{array} \begin{array}{c} \triangleleft \\ \underline{\quad} \end{array} \begin{array}{c} G \\ \underline{\quad} \end{array}}{A} \xrightarrow[\text{hor}]{\alpha_A} M \begin{array}{c} \infty \\ \underline{\quad} \end{array} \begin{array}{c} G \\ \underline{\quad} \end{array}$$

$$\alpha_A \tau = \overbrace{d_A^* d_A}^{-1} d_A^* \tau$$

$$d_A^* d_A \alpha_A \tau = d_A^* \tau$$

$$\frac{M \begin{array}{c} + \\ \text{irr} \end{array} \begin{array}{c} \infty \\ \underline{\quad} \end{array} \begin{array}{c} M \\ \underline{\quad} \end{array} \begin{array}{c} \triangleleft \\ \underline{\quad} \end{array} \begin{array}{c} G \\ \underline{\quad} \end{array}}{A} \times \frac{M \begin{array}{c} + \\ \text{irr} \end{array} \begin{array}{c} \infty \\ \underline{\quad} \end{array} \begin{array}{c} M \\ \underline{\quad} \end{array} \begin{array}{c} \triangleleft \\ \underline{\quad} \end{array} \begin{array}{c} G \\ \underline{\quad} \end{array}}{A} \xrightarrow[\text{curv}]{\varkappa_A} M \begin{array}{c} \infty \\ \underline{\quad} \end{array} \begin{array}{c} G \\ \underline{\quad} \end{array}$$

$$\varkappa_A (\tau_1; \tau_2) = \overbrace{d_A^* d_A}^{-1} \left([\tau_1^h \wedge]^* \tau_2^h - [\tau_2^h \wedge]^* \tau_1^h \right)$$

$$d_A^* d_A \varkappa_A (\tau_1; \tau_2) = [\tau_1^h \wedge]^* \tau_2^h - [\tau_2^h \wedge]^* \tau_1^h$$