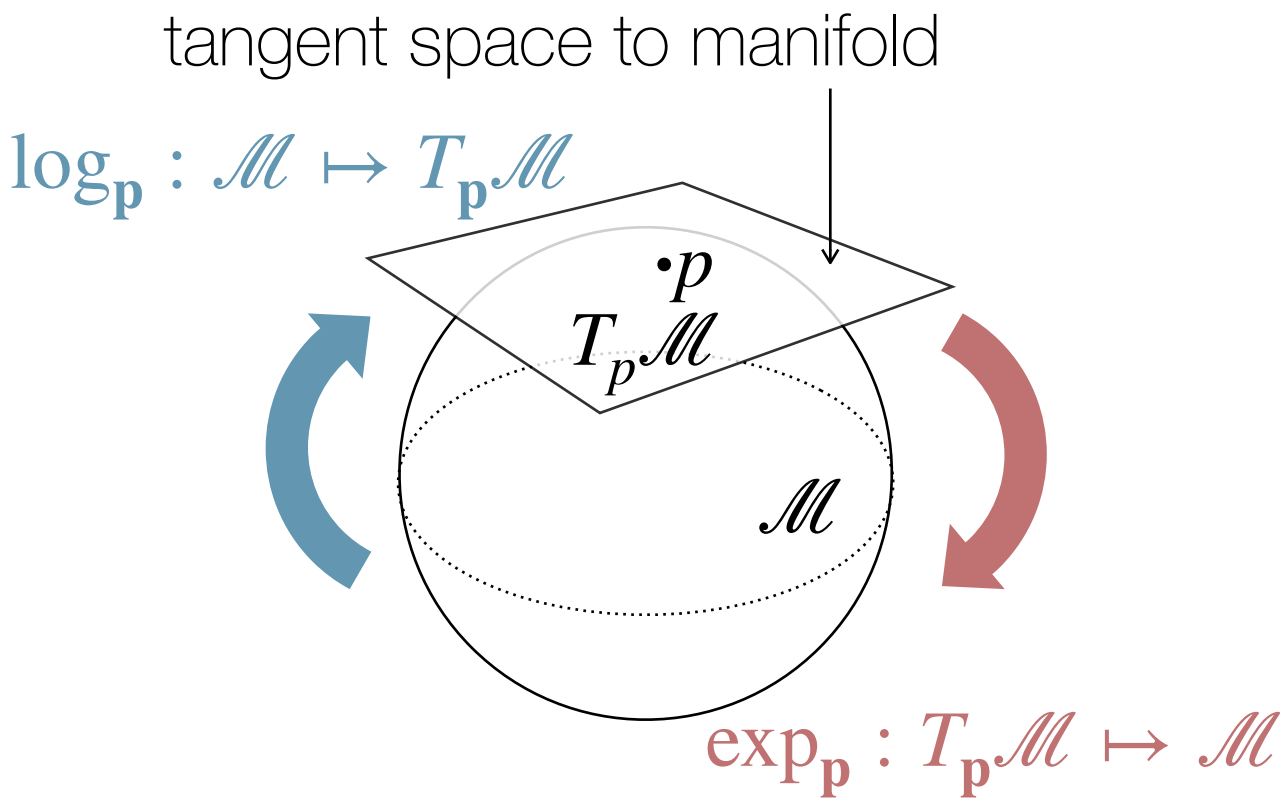
tangent space to manifold
$\log_{\mathbf{p}} : \mathscr{M} \mapsto T_{\mathbf{p}}\mathscr{M}$
p
$T_p\mathscr{M}$
$\mathscr{M}$
$\exp_{\mathbf{p}} : T_{\mathbf{p}}\mathscr{M} \mapsto \mathscr{M}$