

Math 341 Quiz topics for Week 4

- What is  $T_p^{\text{geo}}$  (Definition 4.2)?
- What is a *germ of a differentiable function* at  $p$  on a manifold  $M$  (Definition 4.4)?
- What is  $T_p^{\text{alg}}$  (Definition 4.7)?
- What is  $T_p^{\text{phy}}$  (Definition 4.9)?
- Describe our mapping  $T_p^{\text{geo}} M \rightarrow T_p^{\text{alg}} M$ .
- Describe our mapping  $T_p^{\text{alg}} M \rightarrow T_p^{\text{phy}} M$ .
- Describe our mapping  $T_p^{\text{phy}} M \rightarrow T_p^{\text{geo}} M$ .