

Quiz 6 (11/2/2020)

① What is the de Rham cohomology of a manifold M ?
(Definition)

② What is the Lie derivative of a p -form $\alpha \in \Omega^p(M)$ along a vector field X ?
(Definition and Cartan's formula)

③ ^(as a manifold) What is the dimension of the bundle of p -forms $\Lambda^p T^*M$ over a n -mfd M ?
And what is its rank as a vector bundle over M ?