

1099-53-284

Robert K Hladky* (robert.hladky@ndsu.edu), NDSU Mathematics Dept #2750, Attn:
Melanie, PO Box 6050, Fargo, ND 581086050. *Integrable sub-Riemannian manifolds.*

Looking at sub-Riemannian manifolds of step 2, we shall discuss constructions intrinsic to the sub-Riemannian geometry and define the notion of integrability. This includes several extensively studied special examples, such as strictly pseudoconvex CR manifolds, step 2 Carnot groups and quaternionic contact manifolds, and provides a way of defining special holonomic structures on sub-Riemannian manifolds. We shall consider the existence problem for a structure of a given type and look at some properties of integrable geometries. (Received February 10, 2014)