

1151-53-30 **David N Pham*** (dnpham@qcc.cuny.edu). *On the tangent Lie group of a symplectic Lie group.*

A symplectic Lie group is a Lie group G with a left invariant symplectic form ω . In this talk, I discuss recent work where it is shown that the tangent Lie group TG is itself a symplectic Lie group, where the left invariant symplectic form on TG is induced from ω using complete and vertical lifts of left invariant vector fields on G . One of the upshots of this construction is that by starting with a non-abelian symplectic Lie group (G, ω) , one can generate non-abelian symplectic Lie groups of arbitrarily high dimension simply by taking iterated tangent bundles of G . (Received July 24, 2019)