1108-53-283   **Rachelle C DeCoste** and **Lisa A DeMeyer*** (`demey1la@cmich.edu`), Mathematics Department, Pearce 214, Central Michigan University, Mount Pleasant, MI 48858. *Totally geodesic submanifolds in 2-step nilpotent Lie groups.*

Let N be a 2-step nilpotent Lie group with left invariant metric. We give conditions under which a totally geodesic submanifold is also a subgroup, generalizing results of P. Eberlein (1994) and will present results on properties of the associated totally geodesic subalgebra. (Received January 16, 2015)