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Vasileios Chousionis* (vasileios.chousionis@uconn.edu), Department of Mathematics,
University of Connecticut, 196 Auditorium Road U-3009, Storrs, CT 06269-3009. *Densities and
uniformly distributed measures in the Heisenberg group.*

We prove Marstrand's density theorem in the Heisenberg group \mathbb{H}^n with respect to the Korányi metric d_H . The proof relies on an analysis of uniformly distributed measures on (\mathbb{H}^n, d_H) . We provide a number of examples of such measures, illustrating both the similarities and the differences of this sub-Riemannian setting from its Euclidean counterpart. We will also discuss uniform measures in the first Heisenberg group. Based on joint works with Jeremy T. Tyson and V. Magnani. (Received September 20, 2015)