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

Marstrand's density theorem, dating from 1964, is one of the fundamental results in Geometric Measure Theory. In this talk I will give a brief overview of recent developments on measure-theoretic densities related to Marstrand's theorem. In particular I will discuss Marstrand's theorem in the Heisenberg group (joint work with Jeremy Tyson), relying on an analysis of uniformly distributed measures. Examples of such measures will be discussed, illustrating both the similarities and the differences of this sub-Riemannian setting from its Euclidean counterpart. (Received January 31, 2016)