1083-53-208 **John B Etnyre**, **Rafal Komendarczyk*** (rako@tulane.edu) and **Patrick Massot**.

Quantitative Darboux theorems in contact geometry.

I will describe various forms of useful compatibility between the contact structures and Riemannian metrics. Then sketch how to obtain a lower bound for the radius of a geodesic ball in a contact $(2n+1)$–manifold that can be embedded in the standard contact structure on $\mathbb{R}^{2n+1}$, that is on the size of a Darboux ball. The bound is derived in a compatible Riemannian metric. (Received August 28, 2012)