1017-51-114Rafal Komendarczyk* (rako@math.gatech.edu), School of Mathematics, 686 Cherry St.,
Atlanta, GA 30332. Tight Beltrami fields with symmetry.

It is known since the work of Chern and Hamilton that every contact 1-form admits an adapted Riemannian metric. On 3-manifolds, a natural problem which arises is whether we can characterize properties of metrics adapted to tight (or overtwisted) contact structures. In this talk I will sketch a proof of the theorem which provides such a characterization for tight contact forms admitting a regular Killing contact vector field. (Received February 16, 2006)