1086-53-2023 **Fatima Mahmood*** (fmahmoo2@z.rochester.edu), Department of Mathematics, University of Rochester, Rochester, NY 14627. *Jacobi Structures on Contact Quotients.*

A Jacobi structure on a manifold is a pair (Λ, E), where Λ is a bivector field and E is a vector field, that satisfies certain properties. The Jacobi structure gives rise to a Jacobi bracket on the algebra of smooth functions on the manifold. This can be generalized to the notion of a Jacobi bracket on an abstract commutative algebra. A contact quotient is the orbit space of a certain subset of a contact manifold under an action of a Lie group. Contact quotients are in general singular but have stratifications into contact manifolds. In this talk, we will review the notion of differential forms on contact quotients and define a Jacobi bracket on the algebra of 0-forms on the quotient. We will relate the Jacobi structure on the total quotient space to the one present on each stratum. (Received September 24, 2012)