1056-37-8 **Amie Wilkinson***, Department of Mathematics, Northwestern University, Evanston, IL. Chaos and symmetry in partially hyperbolic systems.

Partially hyperbolic dynamical systems arise in a variety of classical contexts, in systems of both algebraic and geometric origin. These systems are subject to a range of symmetries and at yet are typically chaotic and highly unpredictable in their long-term behavior. In this talk I will survey results about partially hyperbolic systems and discuss the interplay between the mechanisms behind both chaos and symmetry, which also lead to various rigidity phenomena. (Received April 08, 2009)