1147-35-365   **Dean Baskin***, Department of Mathematics, Mailstop 3368, Texas A&M University, College
                     Station, TX 77843. *Radiation fields for wave equations.*

Radiation fields are rescaled limits of solutions of wave equations near "null infinity" and capture the radiation pattern seen by a distant observer. They are intimately connected with the Fourier and Radon transforms and with scattering theory. In this talk, I will define and discuss radiation fields in a few contexts, with an emphasis on spacetimes that look flat near infinity. The main result is a connection between the asymptotic behavior of the radiation field and a family of quantum objects on an associated asymptotically hyperbolic space. (Received January 21, 2019)