1128-35-270   **Peter Hintz*** (`phintz@berkeley.edu`), Department of Mathematics, 805 Evans Hall, Berkeley, CA 94720, and **Maciej Zworski**. *Resonances for obstacles in hyperbolic space.*

We consider scattering by star-shaped obstacles in hyperbolic space and show that resonances satisfy a universal bound $\Im\lambda \leq -1/2$; in odd dimensions and for small obstacles with diameter ρ, we improve this to $\Im\lambda < -C/\rho$ for a universal constant C. Our proofs largely rely on the classical vector field approach of Morawetz. We also explain how to relate resonances for small obstacles to scattering resonances in Euclidean space. (Received February 28, 2017)