Hans Christianson* (hans@math.unc.edu), CB #3250 Dept. of Mathematics, UNC, Chapel Hill, NC 27599, and Dylan Muckerman. Local Smoothing Estimates near a Trapped Set with Infinitely Many Connected Components.

We prove a local smoothing result for the Schrödinger equation on a class of surfaces of revolution which have infinitely many trapped geodesics. Our main result is a local smoothing estimate with loss depending on the accumulation rate of the critical points of the profile curve. The proof uses an h-dependent version of semiclassical propagation of singularities, and a result on gluing an h-dependent number of cutoff resolvent estimates. (Received January 19, 2015)