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**Hans Christianson\*** ([hans@math.berkeley.edu](mailto:hans@math.berkeley.edu)), Mathematics Department, Evans Hall,  
University of California, Berkeley, CA 94720. *Semiclassical Estimates near Hyperbolic Orbits and  
Applications.*

We present semiclassical estimates for principal type operators near a generic hyperbolic orbit of the classical flow. We show how these estimates can be used to obtain cutoff resolvent estimates with a logarithmic loss compared to the non-trapping case. As applications, we prove local smoothing estimates for the Schrödinger equation and local energy decay estimates for the wave equation in odd dimensions. (Received September 09, 2006)