Ramin G. Daghigh and Michael D. Green\* (michael.green@metrostate.edu), Department of Mathematics, Metropolitan State University, 700 E. 7th Street, St. Paul, MN 55106. The Highly Damped Quasinormal Modes of Extremal Non-Rotating, Charged Black Holes.

We analyze the highly damped quasinormal modes of non-rotating, charged black holes in the extremal case; i.e. where the event horizon and the Cauchy inner horizon coincide. We show that the highly damped quasinormal modes of extremal black holes match exactly with the extremal limit of non-extremal black holes. This talk will demonstrate some of the relevant mathematical techniques. (Received September 19, 2007)