1107-35-84          **jiuyi zhu\*** (`jzhu43@math.jhu.edu`), Department of Mathematics, Johns Hopkins University, Baltimore, MD 21218. *Quantitative uniqueness of elliptic equations.*

Based on a variant of frequency function, we improve the vanishing order of solutions for Schrödinger equations which describes quantitative behavior of strong uniqueness continuation property. For the first time, we investigate the quantitative uniqueness of higher order elliptic equations and show the vanishing order of solutions. Furthermore, strong unique continuation is established for higher order elliptic equations using this variant of frequency function. (Received January 15, 2015)