962-31-990 **Alexander I Kheyfits*** (alexander.kheyfits@bcc.cuny.edu), Dept. of Math. and CS, Bronx Comm. College/CUNY, University Avenue @ W. 181st Street, Bronx, NY 10453. *Lower bounds of generalized subharmonic functions.*

For the upper-bounded subsolutions of the stationary Schrödinger equation $L_c u(x) \equiv -\Delta u(x) + c(x)u(x) = 0$ under appropriate assumptions on the potential c we prove the following uniform lower estimate outside of an exceptional set: Let Ω be a ball or a half-ball of the radius R in R^n, $n \geq 2$. If $L_c u \leq 0$, $u(x) \leq M < \infty$ everywhere in $\overline{\Omega}$, and $u(x_0) \geq 0$ at a point $x_0 \in \Omega$, then for every $\varepsilon > 0$ there exists an exceptional set $\mathcal{B} \subset \overline{\Omega}$ such that

$$u(x) \geq -\, C(n,\ \Omega) M \varepsilon^{-1},\ \ \forall x \in \Omega \setminus \mathcal{B},$$

where the constant C does not depend on x. Moreover, the set $\mathcal{B}$ can be covered by the union of balls $B(x_k,\ \rho_k) = \left\{ x \in \Omega \middle| \ | x - x_k | \leq \rho_k \right\}$, $k = 1, 2, \ldots$, such that $\sum_{k=1}^{\infty} (\rho_k / R)^{n-1} < \varepsilon$.
The result is a corollary of an upper estimate for the differences of such subsolutions. (Received September 30, 2000)