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MR943081 (89i:35043) 35J10 (35B45) Kenig, Carlos E. (1-CHI); Sogge, Christopher D. (1-CHI) A note on unique continuation for Schrödinger's operator. *Proc. Amer. Math. Soc.* 103 (1988), *no.* 2, 543–546.

The following unique continuation theorem is proved for the Schrödinger operator. Let  $\Delta$  be the Laplace operator; assume  $u \in W^p(\mathbf{R}^{n+1})$ ,  $|(i\partial/\partial t + \Delta)u(x,t)| \leq |V(x,t)u(x,t)|$  for some  $V \in L^{(n+2)/2}(\mathbf{R}^{n+1})$  and u = 0 in some half-space of  $\mathbf{R}^{(n+1)}$ ; then u = 0 on  $\mathbf{R}^{n+1}$ . This theorem is a corollary of "uniform Sobolev inequalities" for operators which are the Schrödinger operator plus lower-order terms in x.

Reviewed by Jean Leray

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