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I. M. SIGAL

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ADDENDUM

« Complex transformation method and resonances in one-body quantum systems »

(*Ann. Inst. Henri Poincaré*, t. XLI, n° 1, 1984, p. 103-114).

by I. M. SIGAL

Department of Theoretical Mathematics,
The Weizmann Institute of Science, Rehovot 76100, Israel

(1) Condition (3.8) must be replaced by the following condition

$$|f(\zeta)| < C |\zeta| (1 + \|\operatorname{Re} \zeta\|)^{-\alpha} \quad \text{for some } \alpha > 1 \quad (*)$$

This change does not effect the estimates. Indeed, the inequality (9.8) as it stands was used only in the proof of the statement $\operatorname{Image} \varphi_{iy} \in \Lambda_{\delta, \alpha}$ (which is not used in the paper anyway) from lemma 3.3. In the proof of the other statements of this lemma we used only that $|f(\zeta)| < C |\zeta|$. To prove that $\operatorname{Image} \varphi_{iy} \in \Lambda_{\delta, \alpha}$ using (*), one must apply the inequality

$$\sup_{0 \leq s \leq y} |\varphi_{is}(p)| \leq 3 \|\operatorname{Re} \varphi_{iy}(p)\| \quad (**)$$

(instead of

$$\sup_{0 \leq s \leq y} \|\operatorname{Re} \varphi_{is}(p)\| \leq 3 \|\operatorname{Re} \varphi_{iy}(p)\|.)$$

(**) follows from eqn (3.13) and the estimate standing after (3.14).

The author is grateful to H. Cycon for pointing out that the condition (3.8) for a function f analytic in the tube (3.7) implies $f \equiv 0$. On the other hand, $f(\zeta) = \zeta(1 + \|\zeta\|^2)^{-1}$ obeys the new condition (*).

(2) Independently, the generator D_f was introduced and applied to studying the Schrödinger operators in H. Cycon and P. Perry, Local time-decay of high energy scattering states for the Schrödinger equation, Preprint, Technische Universität Berlin. The author is grateful to H. Cycon for pointing this out to him.