Commun. math. Phys. 55, 316 (1977)

Addendum

Herbst, I. W.: Spectral Theory of the Operator $(p^2 + m^2)^{1/2} - Ze^2/r$. Commun. math. Phys. 53, 285–294 (1977)

The author was unaware of the Paper [1] where it is proved that $H^{-1} - H_0^{-1}$ is compact for $Ze^2 < 2/\pi$ $(H = H_0 - Ze^2/|\mathbf{x}|, H_0 = (\mathbf{p}^2 + m^2)^{1/2})$. From the above result and the dilation analytic methods used by Weder in [2], it follows that $\sigma_{\text{ess.}}(H) = \sigma_{\text{a.c.}}(H) = [m, \infty)$ and $\sigma_{\text{s.c.}}(H) = \emptyset$.

The author thanks Professor Weder for informing him of [1].

References

- 1. Weder, R.: J. Funct. Anal. 20, 319-337 (1975)
- 2. Weder, R.: Ann. Inst. H. Poincaré 20, 211-220 (1974)