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Marat V. Markin* (mmarkin@csufresno.edu), Department of Mathematics, California State University, Fresno, 5245 North Backer Avenue, M/S PB108, Fresno, CA 93740-8001. *On Certain Spectral Features Inherent to Scalar Type Spectral Operators.*

Important spectral features, such as the emptiness of the residual spectrum, countability of the point spectrum, provided the space is separable, and a characterization of spectral gap at 0, known to hold for *bounded* scalar type spectral operators in a complex Banach space, are shown to naturally transfer to the *unbounded* case.

The results' encompassing normal, in particular self-adjoint, operators in a complex Hilbert space makes the foregoing characterization of interest for quantum mechanics. (Received March 21, 2017)