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**Gerardo A Mendoza\*** (gmendoza@temple.edu), Philadelphia, PA 19122. *Spectral instability of selfadjoint extensions.*

Let  $M$  be a smooth compact manifold with boundary, boundary defining function  $x$ , and smooth  $b$ -density  $\mathfrak{m}_b$ . Further let  $E, F \rightarrow M$  Hermitian vector bundles and  $A : C_c^\infty(\overset{\circ}{M}; E) \subset x^{-\nu/2}L_b^2(M; E) \rightarrow x^{-\nu/2}L_b^2(M; F)$  a symmetric elliptic cone operator which is bounded from below and admits more than one selfadjoint extension. The family,  $\mathfrak{SA}$ , of domains of such extensions has the structure of a smooth compact real-analytic manifold. The spectrum of  $A$  with any domain  $D \in \mathfrak{SA}$  is bounded below, but there exist domains  $D_0$  which admit a neighborhood  $U \subset \mathfrak{SA}$  in which the property  $\forall \zeta \in \mathbb{R} \exists D \in U$  s.t.  $\zeta > \inf \text{spec}(A_D)$  holds. I will give a characterization of these spectrally unstable domains. (Received January 28, 2014)