

1144-47-107

Lara M. Ismert* (lara.ismert@huskers.unl.edu). *Kernel Stabilization of Derivations on C^* -algebras.*

We consider a weakly-defined derivation on $B(H)$ that is implemented by an unbounded self-adjoint operator. We show that this derivation has a surprising property, which we refer to as *kernel stabilization*. Consequently, a certain class of derivations on C^* -algebras, originally studied in a 1975 article by Bratteli and Robinson, also have kernel stabilization. As another corollary, we provide what we believe are new conditions under which two self-adjoint operators satisfying the Heisenberg Commutation Relation must both be unbounded. (Received August 16, 2018)