

Consistent in invertibility operators and SVEP

Bhaggy Duggal

United Arab Emirates Univ, UAE
bpduggal@yahoo.co.uk

A Banach space operator $A \in B(X)$ is consistent in invertibility (resp., Fredholm consistent) if AB and BA are either both invertible or both non-invertible (resp., both Fredholm or both non-Fredholm) for every operator $B \in B(X)$. We shall report on some joint work (with Dragan Djordjevic and Robin Harte) in progress to prove:

- (i) A is consistent in invertibility if and only if either both A and A^* have SVEP at 0 or neither of A and A^* has SVEP at 0;
- (ii) A is Fredholm consistent if and only if either both A and A^* have essential SVEP at 0 or neither of A and A^* has essential SVEP at 0. Here A has essential SVEP at 0 if the Buoni, Harte and Wickstead extension T_q of T has SVEP at 0.

References

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