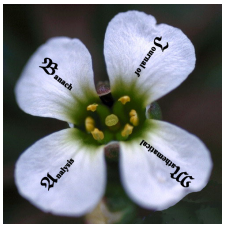

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ON EXISTENCE OF HYPERINVARIANT SUBSPACES FOR LINEAR MAPS

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Abstract. Let X be an infinite dimensional complex vector space. We show that a non-constant endomorphism of X has a proper hyperinvariant subspace if and only if its spectrum is non-void. As an application we show that each non-constant continuous endomorphism of the locally convex space (s) of all complex sequences has a proper closed hyperinvariant subspace.

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