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A splitting theorem for holomorphic Banach bundles

This talk is motivated by Grothendieck's theorem, according to which every finite rank vector bundle over $\mathbb{P}_1$ splits into the sum of line bundles. In the 1960s, Gohberg generalized this to a class of Banach bundles. We consider a compact complex manifold X (thus $\dim X < \infty$) and a holomorphic Banach bundle $E \to X$ that is a compact perturbation of a trivial bundle in a sense recently introduced by Lempert. We prove that E splits into the sum of a finite rank bundle and a trivial bundle, provided $H^1(X, \mathcal{O}) = 0$.