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Yaniv Almog* (almog@math.lsu.edu), Department of Mathematics, Lockett Hall, LSU, Baton Rouge. *Completeness of the eigenspace of some non-self-adjoint operators.*

We consider the eigenspace of $\mathcal{P} : D \rightarrow L^2(\Omega)$, where

$$\mathcal{P} = -\mathcal{P}_0^2 + V,$$

in which

$$\mathcal{P}_0 = \sum_{k=1}^d e^{i\alpha_k} \left(\frac{\partial}{\partial x_k} - iA_k \right) \hat{i}_k.$$

In the above $A = (A_1, \dots, A_d)$ is a smooth magnetic field, and V is a complex potential. The domain Ω is a smooth unbounded subset of \mathbb{R}^d , and D is a subset of $H_0^1(\Omega)$. We then apply the results to the linearized Ginzburg-Landau operator in a half-space.

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