A SETTING FOR GENERALIZED ORTHOGONALIZATION

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This paper is dedicated to Professor Tsuyoshi Ando, with affection and admiration

Communicated by L. Székelyhidi

ABSTRACT. Let $\mathcal{H}$ be a complex Hilbert space. We study the geometry of the space of pairs (A, E), for A a (semidefinite bounded linear) positive operator on $\mathcal{H}$ and E a (bounded linear) projection on $\mathcal{H}$ such that $AE = E^*A$.

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