

Oblique projections and products of orthogonal projections

Gustavo Corach

Instituto Argentino de Matematica (IAM), CONICET, Argentina
gcorach2000@yahoo.com

A characterization is presented of partial isometries (resp. positive semidefinite operators) which appear in the polar decomposition of an oblique projection in a Hilbert space. A study of operators that can be expressed as the product of two orthogonal projections is presented, which extends a result by Greville on the Moore-Penrose inverse of oblique projections.