

THE LINEAR PENCIL AND POLAR DECOMPOSITION

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(JOINT WORK WITH JAEWOONG KIM AND JASANG YOON)

In this talk we introduce the (spherical) polar decomposition of a linear pencil of an ordered pair $(A; B)$ and we give some properties of it. Using this way of decomposition of a pair of operators, we are able to define a several types of Aluthge transforms for a linear pencil of operators.

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