MOORE-PENROSE INVERSE AND OPERATOR MEAN

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$Dedicated\ to\ the\ memory\ of\ the\ late\ professor\ Takayuki\ Furuta$

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ABSTRACT. Recently the geometric operator mean is extended to the multi-variable one; the Karcher mean. Including these multivarible means, we discuss a construction method by the Moore-Penrose inverse. The key concept is the orthogonality of operator means.

Key words and phrases. operator mean, kernel inclusion, transformer inequality, generalized inverse.