

1059-47-208

Mihai Putinar* (mputinar@math.ucsb.edu), Mathematics Department, UCSB, Santa Barbara, CA 93106. *Positivstellensatze in the free-^{*} context.*

A survey of the known decomposition results for positive elements of a free-^{*} algebra (with supports) will be given. Examples and application to optimization will complement the theoretical results. (Received February 23, 2010)