

Positive matrices and applications to Hankel operators

Marcus Carlsson

Abstract

Given an “infinite symmetric matrix” W we give a simple condition, related to the shift operator being expansive on a certain sequence space, under which W is positive. We apply this result to *AAK*-type theorems on generalized Hankel operators, providing new insights related to previous work by S. Treil and A. Volberg. We also discuss applications and open problems.