

Accepted Manuscript

AN EXTENSION OF THE STAR COMPLEMENT TECHNIQUE FOR
REGULAR GRAPHS

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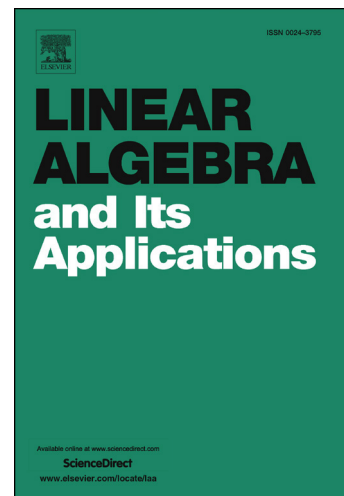
PII: S0024-3795(18)30397-5
DOI: <https://doi.org/10.1016/j.laa.2018.08.018>
Reference: LAA 14697

To appear in: *Linear Algebra and its Applications*

Received date: 26 March 2018
Accepted date: 7 August 2018

Please cite this article in press as: P. Rowlinson, AN EXTENSION OF THE STAR COMPLEMENT TECHNIQUE FOR
REGULAR GRAPHS, *Linear Algebra Appl.* (2018), <https://doi.org/10.1016/j.laa.2018.08.018>

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AN EXTENSION OF THE STAR COMPLEMENT TECHNIQUE FOR
REGULAR GRAPHS

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Abstract

We extend the means by which a regular graph can sometimes be identified from a star complement. In two applications we determine (i) the regular graphs with a path as a star complement for the eigenvalue 1, (ii) the extremal regular graphs which have another type of tree as a star complement for an eigenvalue $\neq -1, 0$.

AMS Classification: 05C50

Keywords: eigenvalue, regular graph, star complement, tree.

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