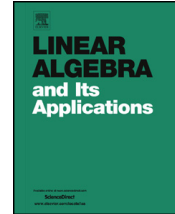




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Linear Algebra and its Applications

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Orbit representations from matrices [☆]



C. Correia Ramos ^a, Nuno Martins ^b, Paulo R. Pinto ^{b,*}

^a *Centro de Investigação em Matemática e Aplicações, Department of Mathematics, Universidade de Évora, R. Romão Ramalho, 59, 7000-671 Évora, Portugal*

^b *Department of Mathematics, CAMGSD, Instituto Superior Técnico, Universidade de Lisboa, Av. Rovisco Pais 1, 1049-001 Lisboa, Portugal*

ARTICLE INFO

Article history:

Received 18 November 2013

Accepted 2 April 2014

Available online 23 April 2014

Submitted by P. Semrl

MSC:

46L55

37B10

37E05

46L05

Keywords:

Primitive matrices

Cuntz–Krieger algebras

Orbit representations

State splitting

ABSTRACT

Each Markov interval map f naturally produces a transition 0–1 matrix of interval type (in every row, the entries equal to 1 should be consecutive). We show that any 0–1 matrix A can be transformed into an interval type matrix A_I , by a careful use of the state splitting. We then prove that A_I can be realized as a transition matrix of an interval map $f_{A_I, \lambda_{A_I}}$ arising from the Perron–Frobenius eigenvalue λ_{A_I} and eigenvector of A_I . Finally, we construct orbit representations associated with A from those of A_I arising from the dynamical system $([0, 1], f_{A_I, \lambda_{A_I}})$.

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[☆] First author acknowledges CIMA-UE for financial support. The last two authors were partially supported by the Fundação para a Ciência e a Tecnologia through the Program POCI 2010/FEDER.

* Corresponding author.

E-mail addresses: ccr@uevora.pt (C. Correia Ramos), nmartins@math.tecnico.ulisboa.pt (N. Martins), ppinto@math.tecnico.ulisboa.pt (P.R. Pinto).