


 AbstractPlus

BROWSE

SEARCH

IEEE XPLORE GUIDE

SUPPORT

[View TOC](#)
[e-mail](#) [printer friendly](#)

Access this document

 Full Text: [PDF](#) (384 KB)

Download this citation

 Choose

 Download

[» Learn More](#)

Rights and Permissions

[» Learn More](#)

Rotating stall control for axial flow compressors

[Belta, C.](#) [Guoxiang Gu](#) [Sparks, A.](#) [Banda, S.](#)

Dept. of Electr. & Comput. Eng., Louisiana State Univ., Baton Rouge, LA;

 This paper appears in: [Decision and Control, 1998. Proceedings of the 37th IEEE Conference on](#)

Publication Date: 1998

Volume: 3, On page(s): 2557-2562 vol.3

Meeting Date: 12/16/1998 - 12/18/1998

Location: Tampa, FL, USA

ISBN: 0-7803-4394-8

References Cited: 17

INSPEC Accession Number: 6307071

Digital Object Identifier: 10.1109/CDC.1998.757836

Current Version Published: 2002-08-06

Abstract

Rotating stall is a primary constraint for the performance of axial flow compressors. This paper establishes a necessary and sufficient condition for a quadratic feedback controller to locally stabilize the critical equilibrium of the uniform flow at the inception of rotating stall. The explicit condition obtained in this paper provides an effective synthesis tool for rotating stall control

Index Terms

Inspecc

Controlled Indexing

[compressors](#) [control system synthesis](#) [feedback](#) [stability](#)

Non-controlled Indexing

[axial flow compressors](#) [critical equilibrium](#) [local stabilization](#) [necessary and sufficient condition](#) [quadratic feedback controller](#) [rotating stall control](#) [synthesis tool](#) [uniform flow](#)

Author Keywords

Not Available

Medical Subject Heading (MeSH Terms)

Not Available

PACS Codes

Not Available

DOE Thesaurus Terms

Not Available

References

No references available on IEEE Xplore.

Citing Documents

No citing documents available on IEEEExplore.

[View TOC](#) | [Back to Top](#)
