UNIVERSITY OF CALIFORNIA

Santa Barbara

Seeing and Hearing Fluid Subspaces

by

Aaron Demby Jones

Committee in charge:
Professor Theodore Kim, Chair
Professor JoAnn Kuchera-Morin
Professor Clarence Barlow

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The dissertation of Aaron Demby Jones is approved.					
Professor JoAnn Kuchera-Morin	Date				
Professor Clarence Barlow	Date				
Professor Theodore Kim, Committee Chair	Date				

Seeing and Hearing Fluid Subspaces

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by

Aaron Demby Jones

Acknowledgements

Vita of Aaron Demby Jones

Contact Information

Media Arts and Technology Program University of California, Santa Barbara

Santa Barbara, CA 93106-5080

Phone: (610) 334-1064

 $\hbox{\it E-mail: aaron.demby.jones@mat.ucsb.edu}$

Education

University of California, Santa Barbara

PhD Candidate, Media Arts and Technology Program

Santa Barbara, California

University of Rochester

BA, Mathematics

Rochester, New York

Brown University

BA, Music, Mathematics

Providence, Rhode Island

Honors and Awards

Chancellor's Fellowship, University of California, Santa Barbara	2011–2017
Best Paper Award, Symposium on Computer Animation	2016
Muriel Hassenfeld Mann Premium, Brown University	2009
Buxtehude Premium, Brown University	2008
Margery MacColl Award for Musical Excellence, Brown University	2007

Publications

Jones, Aaron Demby, Kuchera-Morin, JoAnn, and Kim, Theodore. Seeing and hearing the eigenvectors of a fluid (2017), In review.

Jones, Aaron Demby, Sen, Pradeep, and Kim, Theodore. Compressing fluid subspaces. In *Proceedings of the 2016 ACM SIGGRAPH/Eurographics Symposium on Computer Animation*. Eurographics Association, 2016.

Research Experience

University of California, Santa Barbara

2011-2017

Ph.D. Candidate Santa Barbara, California Sonification of subspace methods in computational fluid dynamics for computer graphics.

Advisor: Theodore Kim

Media Arts and Technology Program

Brown University 2008–2009

Senior Honors Thesis Providence, Rhode Island

Percussion Quartet

Advisor: Gerald Shapiro Department of Music

Teaching Experience

University of California, Santa Barbara Spring 2015

Teaching Assistant, Pattern Formation Santa Barbara, California

University of California, Santa Barbara Fall 2014

Teaching Assistant, Music and Technology Santa Barbara, California

University of California, Santa Barbara 2012–2013

Teaching Assistant, Music Appreciation Santa Barbara, California

Vita of Aaron Demby Jones

Hampshire College Summer 2014

Junior Faculty

Hampshire College Summer Studies in Mathematics Amherst, Massachusetts

Franklin and Marshall College

Summer 2012–2013, 2015–2017

Instructor, Number Theory

Johns Hopkins Center for Talented Youth Lancaster, Pennsylvania

University of Rochester

2010–2011

Teaching Assistant, Linear Algebra with Differential Equations Rochester, New York

University of Rochester

2009-2010

Teaching Assistant, Calculus II Rochester, New York

Community Involvement

Peer Review Fall 2016

Reviewer for Eurographics 2017; Computer Graphics Forum

Abstract

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Related Work

Background

Transform-based compression of fluid subspaces

Visualizing and sonifying fluid subspaces

Compositional explorations of fluid subspaces

Conclusions and future work