HARVARD
School of Engineering and Applied Sciences

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Faculty Research Area Directory 2009-2010

APPLIED MATHEMATICS

Computational Science
D. Anderson, Brenner, Kaxiras, Rice

Control Theory and Communications
Brockett, Khaneja, M.A. Smith, Tarokh

Mathematical Biology
Bossert, Brenner, Mahadevan, Nagpal, Nelson, M.A. Smith, Weitz

Mathematical Geophysics
Farrell, Mahadevan, Rice, Tziperman

Physical and Engineering Mathematics
Bloxham, Brenner, Hutchinson, Kaxiras, Mahadevan, P. Martin, Nelson, Rice, Suo, Tziperman, Wu

Theoretical Computer Science
Lewis, Mitzenmacher, Rabin, Vadhan, Valiant

APPLIED PHYSICS

Biophysics
Aizenberg, Auguste, Brenner, Cluzel, Golovchenko, Ingber, Joshi, Mahadevan, Manoharan, Mooney, Nagpal, Needleman, Nelson, Parker, Sharad Ramanathan, Weitz, Westervelt

Electronic and Magnetic Systems and Devices
Capasso, Clarke, Golovchenko, Ham, Hu, Kaxiras, Lieber, Loncar, Narayanamurti, Ramanathan, Westervelt

Materials Science
Aizenberg, Auguste, Aziz, Clarke, Cluzel, Friend, Hu, Joshi, Kaxiras, Lieber, Mahadevan, Manoharan, Narayanamurti, Needleman, Sharad Ramanathan, Shriram Ramanathan, Spaepen, Vlassak, Weitz

Oceans, Atmospheres, and Geophysics
J. Anderson, Bloxham, Farrell, Jacob, Kuang, S. Martin, McElroy, Rice, Schrag, Tziperman, Wofsy

Optics, Electromagnetics, and Light-Matter Interactions
Capasso, Clarke, Crozier, Golovchenko, Ham, Hau, Hu, Loncar, Manoharan, Murray, Mazur

Soft Condensed Matter
Aizenberg, Brenner, Cluzel, Golovchenko, Mahadevan, Manoharan, Murray, Needleman, Nelson, Pershan, Sharad Ramanathan, Spaepen, Weitz

Surface and Interface Science
Aizenberg, Aziz, Cluzel, Friend, Golovchenko, Kaxiras, Mahadevan, Manoharan, Murray, Narayanamurti, Needleman, Pershan, Sharad Ramanathan, Shriram Ramanathan, Spaepen, Vlassak, Weitz

Theory and Simulation
Brenner, Hutchinson, Kaxiras, Mahadevan, Nelson, Rice, Tziperman, Suo, Wu

BIOENGINEERING

Bio-Inspired Engineering
Aizenberg, Edwards, Ingber, Joshi, Mahadevan, Mooney, Nagpal, Parker, Wood

Biomechanics
Aizenberg, Brenner, Cluzel, Edwards, Howe, Ingber, Mahadevan, Mooney, Parker, M.A. Smith, Weitz, Wood

Cell and Tissue Engineering
Aizenberg, Auguste, Cluzel, Edwards, Ingber, Joshi, Mahadevan, Mooney, Needleman, Parker, Sharad Ramanathan, Weitz, Westervelt

Instrumentation and Imaging
Cluzel, Howe, Parker, Weitz

Neuroengineering
Brockett, Parker, M.A. Smith

COMPUTER SCIENCE

Artificial Intelligence, Multi-Agent Systems, Comp. Linguistics
Chen, Gajos, Grosz, Nagpal, Parkes, Shieber

Bio-Inspired Robotics and Computing
Nagpal, Wood

Computation and Economics
Brenner, Chen, Parkes

COMPUTER SCIENCE (cont.)

Graphics and Visualization
Gortler, Pfister, Zickler

Human Computer Interaction
Gajos, Shieber, Pfister, Grosz

Languages, Compilers, and Tools
Chong, Morrisett, M.D. Smith

Networking and Systems
Brooks, Chong, Kung, Morrisett, Seltzer, M.D. Smith, Welsh

Theory of Computation
Lewis, Mitzenmacher, Parkes, Rabin, Vadhan, Valiant

ELECTRICAL ENGINEERING

Circuits and VLSI
Ham, Horowitz, Pfister, Wei, Westervelt, Yang

Communications and Signal Processing
Kung, Tarokh, Wolfe, Zickler

Computer Engineering
Brooks, M.D. Smith, Wei, Yang

Instrumentation and Imaging
Horowitz, Pfister, Welsh, Zickler

Intelligent Systems and Computer Vision
Brockett, Gajos, Howe, Khaneja, Pfister, Tarokh, Wood, Zickler

Photonics and Optical Devices
Capasso, Crozier, Hu, Loncar

RF, Microwaves, and Antennas
Ham

Stochastic Systems
Brockett, Khaneja, M.A. Smith, Tarokh, Wolfe

Systems and Control
Brockett, Khaneja, M.A. Smith, Wood

ENVIRONMENTAL SCIENCES AND ENGINEERING

Atmospheric Chemistry and Climate Modeling
J. Anderson, Jacob, Martin, McElroy, Wofsy

Climate Dynamics and Physical Oceanography
Schrag, Tziperman

Energy and Technology
Aziz, Hu, Martin, Ramanathan, Schrag

Engineering and Economic Development
Briscoe

Environmental Chemistry
Hansel, S. Martin

Environmental Microbiology
Hansel

Geomechanics
Rice

Meteorology and Atmospheric Dynamics
Farrell, Kuang

MECHANICAL ENGINEERING

Fluid Dynamics
Brenner, Mahadevan

Manufacturing Systems
Abernathy

Robotics
Brockett, Howe, M.A. Smith, Wood

Solid Mechanics
Hutchinson, Mahadevan, Rice, Suo, Vlassak

Note:

For complete faculty research profiles and the most up-to-date information, visit

www.seas.harvard.edu/directory

FACULTY AFFILIATIONS

- Applied Mathematics
- Applied Physics
- Bioengineering
- Computer Science
- Electrical Engineering
- Environmental Sciences and Engineering
- Mechanical Engineering

Frederick H. Abernathy	**fha@seas.harvard.edu** www.hctar.org	Manufacturing Systems
Joanna Aizenberg	**jaiz@seas.harvard.edu** www.seas.harvard.edu/aizenberg_lab	Biophysics Materials Science Soft Condensed Matter Surface and Interface Science Bio-Inspired Engineering Biomechanics Cell and Tissue Engineering
Donald G. M. Anderson	**anderson@fas.harvard.edu**	Computational Science
James G. Anderson	**anderson@huarp.harvard.edu** www.arp.harvard.edu	Oceans, Atmospheres, and Geophysics Atmospheric Chemistry and Climate Modeling
Debra T. Auguste	**auguste@seas.harvard.edu** www.seas.harvard.edu/biomat/index.html	Biophysics Materials Science Cell and Tissue Engineering
Michael J. Aziz	**aziz@seas.harvard.edu** www.seas.harvard.edu/matsci/people/aziz/aziz.html	Materials Science Surface and Interface Science Energy and Technology
Jeremy Bloxham	**jeremy_bloxham@harvard.edu** www.fas.harvard.edu/~planets/bloxham.html	Physical and Engineering Mathematics Oceans, Atmospheres, and Geophysics
William H. Bossert	**bossert@seas.harvard.edu**	Mathematical Biology
Michael P. Brenner	**brenner@seas.harvard.edu** www.seas.harvard.edu/brenner/Home.html	Mathematical Biology Computational Science Physical and Engineering Mathematics Biophysics Soft Condensed Matter Theory and Simulation Biomechanics Computation and Economics Fluid Dynamics
John Briscoe	**jbriscoe@seas.harvard.edu** www.johnbriscoe.seas.harvard.edu	Engineering and Economic Development
Roger W. Brockett	**brockett@hrl.harvard.edu** people.seas.harvard.edu/~brockett/brockett.html	Control Theory and Communications Neuroengineering Intelligent Systems and Computer Vision Stochastic Systems Systems and Control Robotics
David M. Brooks	**dbrooks@eecs.harvard.edu** www.eecs.harvard.edu/~dbrooks	Networking and Systems Computer Engineering
Federico Capasso	**capasso@seas.harvard.edu** www.seas.harvard.edu/capasso	Electronic and Magnetic Systems and Devices Optics, Electromagnetics, and Light-Matter Interactions Photonics and Optical Devices
Yiling Chen	**yiling@seas.harvard.edu** www.yiling.seas.harvard.edu	Artificial Intelligence, Multi-Agent Systems, Comp. Linguistics Computation and Economics
Stephen Chong	**chong@seas.harvard.edu** http://people.seas.harvard.edu/~chong	Languages, Compilers, and Tools Networking and Systems
David R. Clarke	**clarke@seas.harvard.edu** www.clarke.seas.harvard.edu	Electronic and Magnetic Systems and Devices Materials Science Optics, Electromagnetics, and Light-Matter Interactions

Philippe Cluzel	**cluzel@seas.harvard.edu** www.cluzel.seas.harvard.edu	Biophysics Materials Science Soft Condensed Matter Surface and Interface Science Biomechanics Cell and Tissue Engineering Instrumentation and Imaging
Kenneth B. Crozier	**kcrozier@seas.harvard.edu** www.seas.harvard.edu/crozier/index.html	Optics, Electromagnetics, and Light-Matter Interactions Photonics and Optical Devices
David A. Edwards	**dedwards@seas.harvard.edu** people.seas.harvard.edu/~dedwards	Bio-Inspired Engineering Biomechanics Cell and Tissue Engineering
Brian F. Farrell	**farrell@seas.harvard.edu** www.fas.harvard.edu/~epsas/people/faculty/farrell	Mathematical Geophysics Oceans, Atmospheres, and Geophysics Meteorology and Atmospheric Dynamics
Cynthia M. Friend	**cfriend@seas.harvard.edu** www.chem.harvard.edu/groups/friend/index	Materials Science Surface and Interface Science
Krzysztof Gajos	**kgajos@eecs.harvard.edu** http://www.eecs.harvard.edu/~kgajos/	Artificial Intelligence, Multi-Agent Systems, Comp. Linguistics Human Computer Interaction Intelligent Systems and Computer Vision
Jene A. Golovchenko	**golovchenko@physics.harvard.edu** physics.harvard.edu/people/facpages/golovchenko.html	Biophysics Electronic and Magnetic Systems and Devices Optics, Electromagnetics, and Light-Matter Interactions Soft Condensed Matter Surface and Interface Science
Steven J. Gortler	**sjg@seas.harvard.edu** www.eecs.harvard.edu/~sjg	Graphics and Visualization
Barbara J. Grosz	**grosz@eecs.harvard.edu** www.grosz.seas.harvard.edu	Artificial Intelligence, Multi-Agent Systems, Comp. Linguistics Human Computer Interaction Intelligent Systems and Computer Vision
Donhee Ham	**donhee@seas.harvard.edu** people.seas.harvard.edu/~donhee	Electronic and Magnetic Systems and Devices Optics, Electromagnetics, and Light-Matter Interactions Circuits and VLSI RF, Microwaves, and Antennas
Colleen Hansel	**hansel@seas.harvard.edu** www.seas.harvard.edu/envmicro/index.html	Environmental Chemistry Environmental Microbiology
Lene V. Hau	**hau@physics.harvard.edu** www.seas.harvard.edu/haulab	Optics, Electromagnetics, and Light-Matter Interactions
Paul Horowitz	**horowitz@physics.harvard.edu** seti.harvard.edu www.physics.harvard.edu/people/facpages/horowitz.html	Circuits and VLSI Instrumentation and Imaging
Robert D. Howe	**howe@seas.harvard.edu** biorobotics.harvard.edu/~howe	Biomechanics Instrumentation and Imaging Intelligent Systems and Computer Vision Robotics
Evelyn Hu	**ehu@seas.harvard.edu**	Electronic and Magnetic Systems and Devices Materials Science Optics, Electromagnetics, and Light-Matter Interactions Photonics and Optical Devices Energy and Technology
John W. Hutchinson	**hutchinson@husm.harvard.edu** seas.harvard.edu/hutchinson	Physical and Engineering Mathematics Theory and Simulation Solid Mechanics
Donald E. Ingber	**donald.ingber@childrens.harvard.edu** wyss.harvard.edu	Biophysics Bio-Inspired Engineering Biomechanics Cell and Tissue Engineering
Daniel J. Jacob	**djj@io.harvard.edu** www-as.harvard.edu/people/faculty/djj	Oceans, Atmospheres, and Geophysics Atmospheric Chemistry and Climate Modeling

Neel Joshi		Biophysics Materials Science Bio-Inspired Engineering Theory and Simulation Cell and Tissue Engineering
Efthimios Kaxiras	**kaxiras@physics.harvard.edu** www.seas.harvard.edu/ekaxiras	Computational Science Physical and Engineering Mathematics Electronic and Magnetic Systems and Devices Materials Science Surface and Interface Science Theory and Simulation
Navin Khaneja	**navin@hrl.harvard.edu** people.seas.harvard.edu/~navin www.seas.harvard.edu/hbbcl	Control Theory and Communications Intelligent Systems and Computer Vision Stochastic Systems Systems and Control
Zhiming Kuang	**kuang@fas.harvard.edu** www.people.fas.harvard.edu/~kuang	Oceans, Atmospheres, and Geophysics Meteorology and Atmospheric Dynamics
H.T. Kung	**kung@harvard.edu** www.eecs.harvard.edu/~htk www.seas.harvard.edu/hbbcl	Networking and Systems Communications and Signal Processing
Harry R. Lewis	**lewis@harvard.edu** www.eecs.harvard.edu/~lewis	Theoretical Computer Science Theory of Computation
Charles M. Lieber	**cml@cmliris.harvard.edu** www.cmliris.harvard.edu	Electronic and Magnetic Systems and Devices Materials Science
Marko Loncar	**loncar@seas.harvard.edu** nano-optics.seas.harvard.edu	Electronic and Magnetic Systems and Devices Optics, Electromagnetics, and Light-Matter Interactions Photonics and Optical Devices
L. Mahadevan	**lm@seas.harvard.edu** www.seas.harvard.edu/softmat	Mathematical Biology Mathematical Geophysics Physical and Engineering Mathematics Biophysics Materials Science Soft Condensed Matter Surface and Interface Science Theory and Simulation Bio-Inspired Engineering Biomechanics Cell and Tissue Engineering Fluid Dynamics Solid Mechanics
Vinothan N. Manoharan	**vnm@seas.harvard.edu** manoharan.seas.harvard.edu	Biophysics Materials Science Optics, Electromagnetics, and Light-Matter Interactions Soft Condensed Matter Surface and Interface Science
Paul C. Martin	**martin@harvard.edu** www.physics.harvard.edu/people/facpages/martin.html	Physical and Engineering Mathematics
Scot T. Martin	**smartin@seas.harvard.edu** www.seas.harvard.edu/environmental-chemistry	Oceans, Atmospheres, and Geophysics Atmospheric Chemistry and Climate Modeling Energy and Technology Environmental Chemistry
Eric Mazur	**mazur@seas.harvard.edu** mazur-www.harvard.edu	Optics, Electromagnetics, and Light-Matter Interactions
Michael B. McElroy	**mbm@io.harvard.edu** www-as.harvard.edu/people/faculty/mbm	Oceans, Atmospheres, and Geophysics Atmospheric Chemistry and Climate Modeling
Ralph Mitchell	**mitchell@seas.harvard.edu** www.seas.harvard.edu/mitchell	Environmental Microbiology
Michael D. Mitzenmacher	**michaelm@eecs.harvard.edu** www.eecs.harvard.edu/~michaelm	Theoretical Computer Science Theory of Computation
David J. Mooney	**mooneyd@seas.harvard.edu** www.seas.harvard.edu/mooneylab	Biophysics Bio-Inspired Engineering Biomechanics Cell and Tissue Engineering
John Gregory Morrisett	**greg@eecs.harvard.edu** www.eecs.harvard.edu/~greg	Languages, Compilers, and Tools Networking and Systems

Cherry A. Murray	**camurray@seas.harvard.edu**	Optics, Electromagnetics, and Light-Matter Interactions Soft Condensed Matter Surface and Interface Science
Radhika Nagpal	**rad@eecs.harvard.edu** www.eecs.harvard.edu/~rad	Mathematical Biology Biophysics Bio-Inspired Engineering Artificial Intelligence, Multi-Agent Systems, Comp. Linguistics Bio-Inspired Robotics and Computing
Venkatesh Narayanamurti	**venky@seas.harvard.edu** www.seas.harvard.edu/venky	Electronic and Magnetic Systems and Devices Materials Science Surface and Interface Science
Daniel Needleman	**dneedle@seas.harvard.edu** www.needleman.seas.harvard.edu	Biophysics Materials Science Soft Condensed Matter Surface and Interface Science Cell and Tissue Engineering
David R. Nelson	**nelson@physics.harvard.edu** www.physics.harvard.edu/people/facpages/nelson.html	Mathematical Biology Physical and Engineering Mathematics Biophysics Soft Condensed Matter Theory and Simulation
(Kevin) Kit Parker	**kkparker@seas.harvard.edu** www.seas.harvard.edu/diseasebiophysics	Biophysics Bio-Inspired Engineering Biomechanics Cell and Tissue Engineering Instrumentation and Imaging Neuroengineering
David C. Parkes	**parkes@eecs.harvard.edu** http://www.econcs.seas.harvard.edu	Artificial Intelligence, Multi-Agent Systems, Comp. Linguistics Computation and Economics Theory of Computation
Peter S. Pershan	**pershan@seas.harvard.edu** liquids.seas.harvard.edu/peter/welcome.html	Soft Condensed Matter Surface and Interface Science
Hanspeter Pfister	**hanspeter_pfister@harvard.edu** http://gvi.seas.harvard.edu	Graphics and Visualization Human Computer Interaction Circuits and VLSI Instrumentation and Imaging Intelligent Systems and Computer Vision
Michael O. Rabin	**rabin@seas.harvard.edu**	Theoretical Computer Science Theory of Computation
Sharad Ramanathan	**sharad@seas.harvard.edu** www.ramanathanbiophysics.seas.harvard.edu	Biophysics Materials Science Soft Condensed Matter Surface and Interface Science Cell and Tissue Engineering
Shriram Ramanathan	**shriram@seas.harvard.edu** www.seas.harvard.edu/shriram	Electronic and Magnetic Systems and Devices Materials Science Surface and Interface Science Energy and Technology
James R. Rice	**rice@esag.harvard.edu** esag.harvard.edu/rice	Computational Science Mathematical Geophysics Physical and Engineering Mathematics Oceans, Atmospheres, and Geophysics Theory and Simulation Geomechanics Solid Mechanics
Daniel P. Schrag	**schrag@eps.harvard.edu** www.eps.harvard.edu/people/faculty/schrag	Oceans, Atmospheres, and Geophysics Climate Dynamics and Physical Oceanography Energy & Technology
Margo I. Seltzer	**margo@eecs.harvard.edu** www.eecs.harvard.edu/~margo	Networking and Systems
Stuart M. Shieber	**shieber@seas.harvard.edu** www.eecs.harvard.edu/~shieber	Artificial Intelligence, Multi-Agent Systems, Comp. Linguistics Human Computer Interaction, Multi-Agent Systems, Comp. Linguistics
Maurice A. Smith	**mas@seas.harvard.edu** www.seas.harvard.edu/motorlab	Control Theory and Communications Mathematical Biology Biomechanics Neuroengineering Stochastic Systems Systems and Control Robotics

Michael D. Smith	**mike.smith@seas.harvard.edu** www.eecs.harvard.edu/~smith	Languages, Compilers, and Tools Networking and Systems Computer Engineering
Frans A. Spaepen	**spaepen@seas.harvard.edu** seas.harvard.edu/matsci/people/fspaepen/frans.html	Materials Science Soft Condensed Matter Surface and Interface Science
Zhigang Suo	**suo@seas.harvard.edu** www.seas.harvard.edu/suo	Physical and Engineering Mathematics Theory and Simulation Solid Mechanics
Vahid Tarokh	**vahid@seas.harvard.edu** people.seas.harvard.edu/~vahid www.seas.harvard.edu/hbbcl	Control Theory and Communications Communications and Signal Processing Intelligent Systems and Computer Vision Stochastic Systems
Patrick Thaddeus	**pthaddeus@cfa.harvard.edu** http://cfa-www.harvard.edu/mmw/thaddeus.html	Astrophysics Radio Astronomy Spectroscopy of Reactive Molecules
Eli Tziperman	**eli@eps.harvard.edu** www.seas.harvard.edu/climate/eli	Mathematical Geophysics Physical and Engineering Mathematics Oceans, Atmospheres, and Geophysics Theory and Simulation Climate Dynamics and Physical Oceanography
Salil P. Vadhan	**salil@eecs.harvard.edu** www.eecs.harvard.edu/~salil	Theoretical Computer Science Theory of Computation
Leslie G. Valiant	**valiant@seas.harvard.edu** people.seas.harvard.edu/~valiant	Theoretical Computer Science Theory of Computation
Joost J. Vlassak	**jvlassak@seas.harvard.edu** www.seas.harvard.edu/vlassak_group	Materials Science Surface and Interface Science Solid Mechanics
Gu-Yeon Wei	**guyeon@eecs.harvard.edu** www.eecs.harvard.edu/~guyeon	Circuits and VLSI Computer Engineering
David A. Weitz	**weitz@seas.harvard.edu** www.seas.harvard.edu/projects/weitzlab	Mathematical Biology Biophysics Materials Science Soft Condensed Matter Surface and Interface Science Biomechanics Cell and Tissue Engineering Instrumentation and Imaging
Matthew D. Welsh	**mdw@eecs.harvard.edu** www.eecs.harvard.edu/~mdw	Networking and Systems Instrumentation and Imaging
Robert M. Westervelt	**westervelt@seas.harvard.edu** meso.seas.harvard.edu	Biophysics Electronic and Magnetic Systems and Devices Cell and Tissue Engineering Circuits and VLSI
Steven C. Wofsy	**Steven_Wofsy@harvard.edu** www-as.harvard.edu/people/faculty/scw	Oceans, Atmospheres, and Geophysics Atmospheric Chemistry and Climate Modeling
Patrick J. Wolfe	**patrick@seas.harvard.edu** sisl.seas.harvard.edu	Communications and Signal Processing Stochastic Systems
Robert J. Wood	**rjwood@seas.harvard.edu** micro.seas.harvard.edu	Bio-Inspired Engineering Biomechanics Bio-Inspired Robotics and Computing Intelligent Systems and Computer Vision Systems and Control Robotics (microrobotic systems)
Tai T. Wu	**ttwu@seas.harvard.edu** www.physics.harvard.edu/people/facpages/wu.html	Physical and Engineering Mathematics Theory and Simulation
Woodward Yang	**woody@eecs.harvard.edu** www.eecs.harvard.edu/vlsi	Circuits and VLSI Computer Engineering
Todd Zickler	**zickler@seas.harvard.edu** www.eecs.harvard.edu/~zickler	Graphics and Visualization Communications and Signal Processing Instrumentation and Imaging Intelligent Systems and Computer Vision