

Schedule of Events

Recognition Weekend • May 2-3, 2008

Friday, May 2nd

- 9:00 a.m. – 5:00 p.m. The Charles Proteus Steinmetz Symposium
Presentations on student creative, scholarly and research achievement. Programs and information are available in the Arts Atrium, just inside the north entrance to Social Sciences and just inside the entrance to the Olin Building
Student presentation sessions begin at 9:00 a.m.
- 1:00 – 4:00 p.m. Becker Career Center Open House
Becker Career Center
- 5:30 – 8:00 p.m. AEPi & Golub House Cinco de Mayo Fiesta
Golub House
- 6:30 p.m. Steinmetz Symposium Banquet
Upperclass Dining Hall
For Symposium presenters, their parents, guests, and faculty sponsors
- 8:00 p.m. The Union College and Community Orchestra and Choir
Memorial Chapel
“Steinmetz Concert 2008”

Saturday, May 3rd

- 11:00 a.m. – 12:30 p.m. Prize Day
Memorial Chapel
- 12:30 – 2:00 p.m. Steinmetz Symposium continues
Poster Sessions
- 12:30 – 1:30 p.m. Prize Day Reception
Reamer Campus Center Patio
- 1:00 – 2:00 p.m. Union College Jazz Ensemble
Taylor Music Center
Fred L. Emerson Foundation Auditorium

The C-Store will be open:

Friday from 8:45 a.m. – 11:00 p.m.
Saturday from 9:30 a.m. – 11:00 p.m.
Sunday from 4:00 p.m. – 11:00 p.m.

The Nott Memorial will be open:

Friday from 9:00 a.m. – 8:00 p.m.
Saturday from 9:00 a.m. – 6:00 p.m.
Sunday from 10:00 a.m. – 6:00 p.m.

The Bookstore will be open:

Friday from 8:45 a.m. – 4:30 p.m.
Saturday from 9:30 a.m. – 4:30 p.m.
Sunday from 10:00 a.m. – 2:00 p.m.

Schaffer Library will be open:

Friday from 8:00 a.m. – 11:00 p.m.
Saturday from 10:00 a.m. – 10:00 p.m.
Sunday from 11:00 a.m. – 1:00 a.m.

Dedication



Charles Proteus Steinmetz (1865–1923), a professor at Union, was regarded as a leading pioneer of electrical engineering. He served as chief consulting engineer for the General Electric Company, and took charge in 1902 of Union’s new electrical engineering program. He was born in Breslau, Prussia (now Wroclaw, Poland) and studied in Breslau, Zurich and Berlin, receiving his Ph.D. in 1888. Steinmetz, an active socialist with strong anti-racist beliefs, was forced to flee Germany after writing a paper critical of the German government. He immigrated to the United States in 1893. He studied alternating current, and patented a system of AC in 1895. By the time he died, he held over 200 patents. Steinmetz served as a lecturer in undergraduate and post-graduate courses at Union until his death. He wished for his students “the spirit of divine discontent, for without it the world would stand still.”

Union is proud to dedicate the Charles Proteus Steinmetz Symposium on Student Creative, Scholarly and Research Achievement to the memory of this scholar, teacher, and practitioner.

Mary K. Carroll
Director of Undergraduate Research

Sessions are at the following times

Friday, May 2nd, 2008

SESSION I

9:00 – 10:20 a.m.

Concurrent Oral Presentations in Bailey Hall, the Humanities Building, the Olin Building, the Science & Engineering Center and the Social Sciences Building

SESSION II

10:30 a.m. – 12:10 p.m.

Concurrent Oral Presentations in the Arts Building, Bailey Hall, the Humanities Building, the Olin Building, Science & Engineering Center, the Social Sciences Building, and the Taylor Music Center

SESSION III

12:20 – 1:50 p.m.

Poster Session, other Special Presentations

12:20 – 1:30 p.m.

Dance Performances in the Nott Memorial

SESSION IV

2:00 – 3:20 p.m.

Concurrent Oral Presentations in the Arts Building, Bailey Hall, the Humanities Building, the Olin Building, Science & Engineering Center, and the Social Sciences Building

SESSION V

3:30 – 5:10 p.m.

Concurrent Oral Presentations in the Arts Building, Bailey Hall, the Humanities Building, the Olin Building, Science & Engineering Center, and the Social Sciences Building

Improvisational Theater Performance in Yulman Theatre

Saturday, May 3rd, 2008

SESSION VI

12:30 – 2:00 p.m.

Poster Sessions in Reamer Campus Center

1:00 – 2:00 p.m.

Jazz Ensemble in the Taylor Music Center, Fred L. Emerson Foundation Auditorium

Student Visual Arts exhibitions are in the Burns Arts Atrium throughout the weekend.

Session

9:00 – 10:20 a.m. *Concurrent Oral Presentations*

Bailey Hall—201

Moderator: Brenda Johnson

Mathematics I

KATHERINE BELLUCCI

Spherical Trigonometry Applied to Navigation at Sea

STEVE COHEN

Walking on Gaussian Primes

VALERIE GOMES

Tangled Messages

LAURA HUTCHINSON

Ruler and Compass Geometry

Bailey Hall—207

Moderator: Quynh Chu-LaGraff

Neuroscience I

CASSANDRA DENEFRIO

An Investigation of the role of PPT1 on Embryonic Neural Development in *Drosophila Melanogaster*

ANNA KUSCHPEL

Examining the role of galanin in cocaine reward

KATE LANGWIG

An fMRI Study of the Effects of Eye Movement Desensitization and Rehabilitation Therapy on Post-traumatic Stress Disorder Car Accident Patients

STEPHANIE MASON

Coritsol Levels as a Result of Academic Stress

Bailey Hall—312

Moderator: Joshua Hart

Psychology I

RACHEL BENNETT

Previous Media Exposure and the Relation to Change in Body Dissatisfaction after Exposure to the Thin Media Ideal

KATELYN BIANCAMANO

Person Perception

BRITNEY PULLEY

Do We Perceive Eating Disorders as Addictions?

DANA SEIDLER

Lucid Dreaming: Effects on Mood and Health

Humanities Building—014

Moderator: April Selley

Writing & Literature

TIMOTHY BEST-HALL

Machine Translation: Out of Sight, into the Looney Bin

IAN CLEMENTE

Where All the Ladders Start: A Look into the Creative Writing Process

KIMBERLY ROSENBERGER

The Price of Fame

Session

9:00 – 10:20 a.m. Concurrent Oral Presentations

Humanities Building—019

Moderator: Pilar Moyano

Seville, Spain, Term Abroad I

JESSICA CARDINALE	Environmental Progress: A Comparative Study of the United States and Spain
CHELSEA HARGIS	The Language Barrier at Work in Spain
STEVE HERRON	An Introduction to the Flamenco Guitar

Humanities Building—112

Moderator: Michelle Chilcoat

French & Francophone Studies I

ERICA ERLANGER	Seeing Natural Disaster in the French Antilles through Science, Education, and Literature
MAEVE KEHOE	Attitudes Towards Bilingualism in Canada
MOLLY MERZ	An Informative Look at the Haitian Community in Boston
ELIZAVETA SAGUIRIAN	Paradis ou Réalité?: An Analysis of Tourism in Martinique

Olin Building—106

Moderator: David Cotter

Media, Muslims and Medicine: Sociological Analyses

MARY ABRAHAM	Ayurveda: India's best kept secret
GERALDINE EMMANUEL	Victim, Sidekick, or Clown: The Depiction of South Asians in Western Television and Film
NAAZIA HUSAIN	The Psychosocial Impact of 9/11 on Young American Muslims

Olin Building—115

Moderator: Kristin Fox

Biochemistry & Chemical Biology

ALEXANDER CARRESE	Cloning and Expression of a Putative Metacaspase Gene from <i>Schizophyllum commune</i>
OLGA DAVYDENKO	Quantum Dots as FRET Donors in Molecular Beacons
SYED HUSSNAIN	Cloning and expression of <i>Scp1</i> , a yeast metacaspase homologue, from <i>Schizophyllum commune</i>
LATOYA ROPER	The Synthesis of Polypeptide Analogues used as Molecular Transporters

Session

9:00 – 10:20 a.m. Concurrent Oral Presentations

Olin Building—307

Moderator: John Garver

Environmental Science & Geoscience I

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|-------------------------|--|
| EMILY FOLLANSBEE | Test of a specific technique to reduce the impact of <i>Alliaria petiolata</i> on growth of a native tree seedling |
| AMANDA KERN | Study of 20th century trends in stream flow for West Canada and Schoharie Creeks of the Mohawk-Hudson Rivers watershed |
| CATHERINE KIELB | Stream Gradient and Knickpoint Evolution in the Plotterkill Nature Preserve, New York |
| ALLISON PHELAN | Flood severity and changes in floodplain area along urban sections of the Mohawk River through the 20th century |
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Science & Engineering Center—N205

Moderator: Kelly Black

Engineering & Computer Science

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|------------------------|---|
| BENJAMIN BUNES | One-Dimensional Particle-Particle and Particle-in-Cell Plasma Simulation Applied to Reactive Ion Etch Processes |
| MICHAEL DONOVAN | Non-Photorealistic Fire |
| ANDREW HEISER | The “Greenest” Option – Environmentally Friendly Pervious Rubberized Concrete |
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Science & Engineering Center—N304

Moderator: Samuel Amanuel

Physics

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|---------------------------|---|
| OTTO JAKUTOWICZ | Detection of Solvent Evaporation From Temperature Dependant FT-IR Spectra |
| BILAL MAHMOOD | Using Dynamic Light Scattering to study the Early Kinetics of Insulin Aggregation |
| STEPHEN PO-CHEDLEY | Investigating Heavy Metals in the Environment from Anthropogenic Sources |
| CRYSTAL SMITH | The Production of Light P-Process Nuclei in the Outflows from Gamma-Ray Burst Accretion Disks |
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Social Sciences Building—012

Moderator: Janet Grigsby

Issues of Sexuality

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|------------------------|---|
| JULIE RAHILL | HIV Risk Factors and Prevention for Men Who Have Sex with Men: The Post-HAART Era |
| JEFFERY CHAO | The impact of sexual orientation on the comfort levels in interracial relationships |
| FELISA WILLIAMS | The Perceived Deviance of African American Male Sexuality |
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Session

9:00 – 10:20 a.m. Concurrent Oral Presentations

Social Sciences Building—014

Moderator: Karen Brison

Anthropology I

CARLY AIMI

Universal Human Rights? A Cross Cultural Perspective on Women's Rights in Fiji and the Borderlands of Mexico

SARA MELTON

A Healing Force: The Effect of Converting to Pentecostal Christianity

ALLISON PERSE

Forging Personal and Ethnic Identity through Community Arts

Social Sciences Building—016

Moderator: David Cervone

A Selection of Presentations from Various Disciplines I

BRITTANY ADAM

Stochastic modeling to determine turbine performance of the Portuguese Pico wave energy plant

SANTOS AVILA

Violence Consumption in Media: City of God and Bus 174

DANA CARTWRIGHT

jsMath Editor - A Study of Equation Editor Design

DANNA DEBLASIO

Factors Affecting Support of Mental Health Parity Bill

Social Sciences Building—017

Moderator: Ellen Foster

Development Economics

ILYA ASPIS

AIDS in Africa: An Economic Study of the Factors that Contribute to the Prevalence of the Disease

BILAL CHAUDARY

Analyzing the Impact of Health on Sub-Saharan African Growth through the Construction of a Cross Country Regression Model

JAY SHAH

Analysis of the Relationship Between Investments and Medical Patents in the Medical Sector: Does More Investments Result in More Medical Patents?

Session

10:30 a.m. – 12:10 p.m. Concurrent Oral Presentations

Arts Building—215

Moderator: Shelton Schmidt

A Selection of Presentations from Various Disciplines II

MOLLY FREEMAN

My Inner Self Portrait

JENNIFER GABRIELSKI

The psychological Influences of Empathy and Social Dominance on Alloting Foreign Aid to Countries using Education as a Determinant

TIMOTHY PULASKI

Hydrocarbon Tracer Experimentation in a Hydrogen Fueled Internal Combustion Engine

ANDREW SALEMO

Design of an Adaptive Hockey Puck for the Visually Impaired

Bailey Hall—201

Moderator: William Zwicker

Mathematics II

SUSAN BECKHARDT

Configuration Spaces and Robot Motion Planning

RICHARD BONVENTRE

An Introduction to the Mathematical Formalization of Quantum Mechanics

RONGHUA DAI

Ehrhart Polynomials In 3-way ties Borda Count Voting Theory

MICHAEL DOCTOR

Representing Power in a Future United Nations Security Council

Bailey Hall—207

Moderator: Robert Olberg

Neuroscience II

DAVID SHULMAN

Three-Dimensional Reconstruction Of Prey-Capture-Neuron Receptive Fields In Dragonflies

STEPHANIE SEEMAN

Temporal Correlation of Target-Selective Neuron Activity in the Dragonfly Visual System

ELLIOT IMLER

Using delay timing to determine the information content

JACQUELINE TUTHILL

Structure of visual neurons in the dragonfly brain

ZACH PORTMAN

A Computer Model of Dragonfly Prey Interception

Session



10:30 a.m. – 12:10 p.m. Concurrent Oral Presentations

Bailey Hall—312

Moderator: George Bizer

Social/Personality Psychology

JESSICA GOLDBERG

The Effect of Personality on Supreme Court Decision Making: An Analysis of Justices O'Connor and Frankfurter

MICHELLE KOO

Valence Framing Effect: Do Positively or Negatively Framed Attitudes Affect Persuasion?

LARA LEVINE

Social Dominance Orientation as a Predictor of Social Status

SAMUEL POSNOCK

Getting to know you: Influence of personality in impression formation

JACQUELYN RAFTERY

Relationship of Frustration and Quality of Performance: The Moderating Effect of Individual Differences in the use of Emotion-Regulation Strategies

Humanities Building—014

Moderator: Thomas Lobe

Women's and Gender Studies

STEPHANIE CANNULI

A Modern-day Slavery: Sex Trafficking into the United States

KAITLIN CANTY

Women in the New York State Court System

CAROL SHOTZBARGER

A More Perfect Union? Educating Men and Women Together at Union College

Humanities Building—019

Moderator: Pilar Moyano

Seville, Spain, Term Abroad I

JEFFREY HYDE

My experience with Spanish open-source software entrepreneurs

CRISTINA LIQUORI

From The Pews To The Bleachers: The Social Education of Spanish Youth

KATHARINE MEYER

Flamenco: Art and Identity of Andalucía

Humanities Building—112

Moderator: Michelle Chilcoat

French & Francophone Studies II

JOSEPH CIABURRI

Paralleling Genre and Gender in French Film

HILARY HANDIN

Women's Resistance in France, 1940-1945

ALISON HINKATY

The Veil in France Today: Empowerment or Degradation?

SARAH STILES

Les Femmes Politiques: A Comparative Look at Women in Politics in France and the French Caribbean

Session



10:30 a.m. – 12:10 p.m. Concurrent Oral Presentations

Olin Building—106

Moderator: Jaclyn Cockburn

Environmental & Energy Issues

SARAH CONNER	The carbon emissions from the City of Schenectady
KELLY OWINGS	The Gilboa Dam and its Possible Failure: What it means for NYC and Upstate New York
TIM SCHWARZ	Understanding Hydrogen's Role in A Changing Energy Future
HANNAH WEITZMAN	The Fragility of Coral Reefs: Biology, Human Impact and Marine Policy

Olin Building—115

Moderator: Michael Hagerman

Nanotechnology

BENJAMIN BUNES	Image Processing Techniques Applied to the Analysis of Chiral Features in Nanoscale Images
ANNA GAUDETTE	Enthalpic Relaxation of Polymer Nanocomposites
WILLIAM HOEK	Inclusion of Ruthenium Polypyridine Complexes within Conductive Laponite Films
DAVID KARLIN	Inclusion of PEDOT and PANI Polymers within Ruthenium Sensitized Laponite Thin Films
DANA LASHER	First Order Phase Transition of Physically Restricted Molecules

Science & Engineering Center—N205

Moderator: William Keat

Bioengineering & Mechanical Engineering

WENDY BEATTY	Including Sustainability Issues in a Heating, Ventilating, and Air Conditioning Course
JEFFREY HUTCHISON	Including Sustainability Issues in a Heating, Ventilating, and Air Conditioning Course
IAN SOLON	Including Sustainability Issues in a Heating, Ventilating, and Air Conditioning Course
SCOTT CARROLL	Optimization of ROV for Ballston Lake Exploration
RICHARD PLUTO	Optimization of ROV for Ballston Lake Exploration
LAURA EYMAN	Development of a Portable Toughness Tester
ALEX WEINTRAUB	Determination of the Loading on Bird Feather Shafts

Social Sciences Building—012

Moderator: Michele Angrist

Political Science I

JENNIFER ATCHINSON	To Hell in a Handbasket: The Influence of Christian Fundamentalism on American Foreign Policy
RIAN CAHILL	Ethnicity
CARLA REEVES	Is There Room Under the Big Tent?: A Study of Black Republicans and the GOP's Relationship with the Black Community
JAMAL RICKS	The Demise of the Black Panther Party: The Role of Internal and External Forces in the Obstruction of the Panther Agenda

Session



10:30 a.m. – 12:10 p.m. Concurrent Oral Presentations

Social Sciences Building—014

Moderator: Mark Walker

History I

PHILIP CASTONGUAY	Decisive Stalemate: The Battle of Jutland and Its Impact on the Outcome of The First World War
EMILY LAING	“To Shake Hands with Men-Stealers:” Quaker Antislavery in the Colonial Period, 1676-1738
SARA NASH	October 1962: Missiles & International Diplomacy
CAROL O’HEA	Portuguese Immigrants on Long Island and Transnational Identity, 1965-1980
ROSS WHEELER	Advanced Weapons & Technological dissemination 1945-1950

Social Sciences Building—016

Moderator: Bradford Bruno

A Selection of Presentations from Various Disciplines III

DAVID HARWOOD	Handheld Color Scanner for the Colorblind
ANDREW KRAUSS	Design of a Froude-Scale Testing Tank
JASMINE MALDONADO	Mentally Ill Ought Not Be Capitally Punished: Supreme Court sets Precedent
JOSEPH MARTEL	Shear Stress Measurement in Microfluidic Systems: Liquid Crystal Technique
BENJAMIN MILES	How a Free Open-source Physics Simulation Program can Help in Introductory Physics Education

Social Sciences Building—017

Moderator: Lewis Davis

Topics in Microeconomics

KYLE MARMELSTEIN	Exago, Inc., The Economics of a Strategy
BAILEY RAND	Keeping up with the Joneses. Or the Clarks? Or the Smiths? Economics and Psychology investigate reference group determinants in the relative income hypothesis
KRISTINE SONNENBERG	Wal-Mart's Effects on County Employment: The Role of Education
MATTHEW VIELKIND	Payers and Medical Technology Adoption

Taylor Music Center Emerson Hall

Moderator: Timothy Olsen

Music

RICHARD MOCCIA	Skating, Skanking, and the Ska Community: Unity in North American Third Wave Ska
KYAN NAFISSI	The Creation of a Rock/Blues CD
BERNADETTE PEACE	The Creation of a Rock/Blues CD
NICKOLAS POTVIN	Chet Baker: A Look at His Trumpet Style and Solo Techniques
MATTHEW ZAWODNIAK	A Rock Performance by Four People and Six Loudspeakers

Session



12:20 – 1:50 p.m. • Theater & Dance Department

NOTT MEMORIAL

Dance Performances

Faculty Sponsor & Show Director – Miryam Moutillet

Faculty Choreographers *Miryam Moutillet and Marcus Rogers*

Stage Managers *Richard Leahy and Lauren Wetherell*

Live Music by Pink Floyd *Andy Iorio – Musical Director*
 Tristan Allen - Keyboard
 Paul Amy - Guitar
 Jake Klein – Drums
 Will Wilkins – Bass

Dance Experience Collaborative

Modern Gypsies *Directed by Miryam Moutillet*
Created and performed by Santos Avila, Annie Benfield, Rachel Bennett, Erin Bligh, Jen Fleischer, Katie Newingham, Stacy Paull, Nozomi Sakata and Ayanna Vison-Dobson

Dance Projects

Another Brick in the Wall *Choreographed by Carly Aimi*
Dancers: Carly Aimi, Santos Avila, Lisa Crescenzo, John Feliciano, Katharine Gould, Sara Mark and Brittany Prescott

Is There Anybody Out There? *Choreographed by Joey Hunziker*
Dancers: Victor Cardinali, Lisa Crescenzo, Joey Hunziker, Laura Hutchinson and Richard Leahy

On the Turning Away *Choreographed by Brittany Prescott*
Dancers: Randi Cerini, Colleen Easton, Shauna Keeler, Kira Moldow and Brittany Prescott

Stomp the Nott *Choreographed by Randi Cerini*
Dancers: Randi Cerini, Lisa Crescenzo, Jen Fleischer, Sara Mark, Kira Moldow, Kiersten Pedersen, Rachael Singleton, Katie Sofia, Emily Stano and Amelia Patten Whitney

Love's Forms *Choreographed by Laura Hutchinson*
Dancers: Steve Boddorff, Rivka Fidel, Andy Mak, Alyssa Simeone, Josh Smith and Sami Zayas

Session



12:20 – 1:50 p.m. • Theater & Dance Department (cont'd)

Ballet III

Atom Heart Mother Suite

Choreographed by Miryam Moutillet

Dancers: Randi Cerini, Theresa Foito, Meryl Goldstein, Shauna Keeler, Alexandra Lindsay, Kira Moldow, Brittany Prescott, Marcus Rogers, Alyssa Simeone, Monica Tse and Amelia Whitney

Modern Choreography

One of These Days

Choreographed by Miryam Moutillet

Dancers: Carly Aimi, Val Angell, Randi Cerini, Lisa Crescenzo, Jen Fleischer, Theresa Foito, Meryl Goldstein, Shauna Keeler, Laura Hutchinson, Stacy Paull, Brittany Prescott, Katie Sofia and Amelia Patten Whitney

Jazz Choreography

Comfortably Numb

Choreographed by Marcus Rogers

Dancers: Carly Aimi, Val Angell, Jen Fleischer, Katie Halkyard, Kira Moldow, Stacy Paull, Nozomi Sakata, Julie Vairo and Sami Zayas

Jazz Dance II

Leave Brittney Alone

Choreographed by Marcus Rogers

Dancers: Carly Aimi, Val Angell, Rachel Bennett, Erin Bligh, Randi Cerini, Lisa Crescenzo, Eliza Duquette, Katie Hartnack, Shauna Keeler, Jessica Lord, Marcus Rogers, Stacy Paull, Katie Sofia, Katie Smidt, Emily Stano, Alyssa Simeone, Julie Vairo and Sami Zayas

Tap Dance

Car Wash

Choreographed by Marcus Rogers

Dancers: Val Angell, Rachael Bennett, Katie Halkyard, Emily Stano and Amanda Snyder

Dance Team

Levantanse

Choreographed by Jen Fleischer, Adrienne Hart, Allison Levy, Kira Moldow, Kiersten Pedersen and Brittany Prescott

Dancers: Randi Cerini, Lisa Crescenzo, Jen Fleischer, Molly Freeman, Adrienne Hart, Allison Levy, Sara Mark, Kira Moldow, Kiersten Pedersen, Brittany Prescott, Rachael Singleton, Emily Stano and Katie Sofia

Ballroom Dance Club

Come Closer

Choreographed by Amber Woerner

Dancers: Val Angell, Anna Bastian, Erin Bligh, Steven Boddorff, Pete Bonventre, Emily Burgess, Dana Cartwright, Laura Hutchinson, Megan Hydman, Ben Miles, Casey Sheridan, Dave Sayles, Monica Tse and Steve Walker

*For this performance, we want to thank
The International Education Foundation (IEF)
Dean David Hayes / Arts and Sciences
The Theater Program for their technical support*

Session



12:20 – 1:50 p.m. • Special Presentations

Butterfield Hall—100

Demonstration

BRENT BLYTHE

Rhe-Aux : Magnetorheological Auxilliary Brake System for Heavy Capacity Vehicles

Entrance to Jackson's Garden (rain location : Taylor Music Center 224)

Performance Installation

NOLA RUDOLPH

Exploring Japanese Art Aesthetics through Contemporary Medium

Olin Rotunda & Olin 110

Moderator: Linda Almstead

Poster Session

BENJAMIN ATKINS

Color Pickr

VEDANT BORAD

Preparation of an induction control strain

DUSTIN CONNELLY

HPV Awareness

JUSTIN SCHMIEDEL

HPV Awareness

RACHEL CURTIS

Sociology of Community Meets its Match: Do theories stand their ground when their territory is changed?

DMITRIY GELER

Design of a Portable Photovoltaic Powered Thermoelectric Cooler

ASHLEY GILMAN

Comparisons of three end-of-life care facilities in the New York Capital District

SANGIN LEE

Detecting Deception

JESSE MANGO

Modeling Photosynthesis in the Feathermoss *Pleurozium Schreberi*

ARIEL PALTER

Genocide in Darfur: What We Know. What We Can Do

LINAH RUSERE

Syntheses and Crystal Structures of Mono-, Di- and Trinuclear Cobalt Complexes with a Salen Type Ligand

KENNETH WOOLSON

Metacollage

Session IV

2:00 – 3:20 p.m. Concurrent Oral Presentations

Arts Building—215

Moderator: David Ogawa

Art History & Studio Fine Arts

ROBERT FLICK	Exposed Pixels
SONIA HENDLER	Questioning Identity: Depictions of Women in American Popular Culture and Interpretations by Three Feminist Artists
PAULINE SCHWENK	John Singer Sargent

Social Sciences Building—016

Moderator: Janet Grigsby

Contemporary Social Problems: Crime, Health

AMY NESTLERODE	The CSI Effect
DANIELLE POMAROLE	Obstacles of Autism: A Parent Perspective
ALYSE SHERWIN	How to Successfully Integrate Alternative Medicine with Traditional Western Medicine
GENEVIEVE ST. HILAIRE	Medical Intervention in Childbirth: An Iatrogenic Disease

Bailey Hall—201

Moderator: Julius Barbanel

Mathematics III

JENNIFER HOUGH	Did the Ancient Greeks Invent Calculus?
BILAL MAHMOOD	Medieval Islamic Mathematics and Tile Art Geometry
VALENCIA STARR	Mayan Mathematics

Bailey Hall—207

Moderator: Stephen Romero

Neuroscience III

LINDSAY LARABEE	Self-effacing and Face processing: Why is it harder to process our own face?
NATASHA LUDWIG	The Effect of Low-Impact Strengthening Exercise on Neuropsychiatric Performance and Brain Volume in Demented Patients
JENNA MONASTER	The effects of glucose on memory
NATALIE ULLMAN	Brain Activation During Item-Specific and Relational Processing

Session IV

2:00 – 3:20 p.m. *Concurrent Oral Presentations*

Bailey Hall—312

Moderator: Kenneth DeBono

Psychology II

HILARY KASPRZAK

Underlying Motivations Behind Working Out: Individuals' Motivations to Workout and What This Tells Us About Who They Are

ANNA KUSCHPEL

Gender differences in religiousness as a function of self-monitoring

VICTORIA PAGANO

Mood and Moral Judgment: The Role of Self-Monitoring

AMANDA SLOWIK

The Susceptibility to Employ Labels of Abnormality: The Role of Need for Cognition

Humanities Building—014

Moderator: Anupama Jain

English Honors Thesis I

ASHLEY BANTA

American Indian Representations in Late 20th Century Films and Novels: Beyond Binaries

RACHAEL FEDERICO

“Not Reality. Actuality.”: Tracing the Truth Claim and the Gothic in Contemporary Memoirs

YOLAINE JEAN

The Anatomy of Jane

Humanities Building—019

Moderator: William Garcia

Down in Rio: Constructing Social and Gender Identities in Recent Brazilian Cinema

SANTOS AVILA

Latinos In Major League Baseball

ANNE BENFIELD

The Entertaining and Artifical Interpretation of Life in the Favela: Fernando Meirelles' Cidade de Deus

AMELIA WHITNEY

Madame Satan: Male Identities in Contemporary Brazilian Film

Humanities Building—112

Moderator: Stacie Raucci

Classics I

JEFF ADAMS

A Roman Tyranny?

GIANCARLO ANNESE

Ovid's Heroides as an Exercise in the Scorned Female Lover

ALLISON BAUM

The Evolution and Migration of the Trojan Myth in Ancient Greece and Rome

SAMANTHA ZAYAS

Transforming Texts: Minerva and Arachne in the Present Day

Session IV

2:00 – 3:20 p.m. Concurrent Oral Presentations

Olin Building—106

Moderator: Scott Kirkton

Biological Sciences I

KAITLIN ARNTZEN	Effects of oviposition on jump performance in the American locust (<i>Schistocerca americana</i>)
BRIDGET DUFFY	Growth within an instar reduces jumping performance in American locusts (<i>Schistocera americana</i>)
JEN LIBOUS	Lipid Rafts play a role in normal human follicle stimulating hormone receptor (hFSHR) Signaling
JESSICA ROSENBLUM	Probing human follicle stimulating hormone receptor interactions with caveolin

Olin Building—115

Moderator: Fernando Orellana

A Selection of Presentations from Various Disciplines IV

KATHRYN KRAKOWKA	The Production of Sound in Woodwind Instruments
DEAN PASQUERELLA	Design of a Light Transmission Based Thermochromic Liquid Crystal Temperature Sensor to Assess Neuropathy of the Diabetic Foot
JAMES SCHWABACH	“Where Have You Gone Joe DiMaggio?”: Are Sports Heroes Superfluous Today?
GABRIEL WEBSTER	Exploration with Processing

Olin Building—306

Moderator: James Hedrick

Electrical Engineering I

ERMIN ARIAS	The Baby Protector
LUIS GARCIA	Road Wake-Up Call
JOHNNY JEAN-CALIXTE	Road Wake-Up Call
SAMI HABAYEB	Design Considerations for Sound and Vibration Monitoring
DANIEL HARKENRIDER	Amateur Radio Repeater

Olin Building—307

Moderator: Holli Frey

Environmental Science & Geoscience II

LEIGH MASTIN	Physical and Geochemical Analysis of Tephra Deposits Surrounding Volcán Tepetitlic
ROSALBA QUEIROLO	Exhumation History of the Lepontine Dome in the Southern Swiss Alps
DANIELLE WINEBERG	Risk assessment and the distribution of tephra deposits of the eruption of Volcán Tepetitlic

Session IV

2:00 – 3:20 p.m. *Concurrent Oral Presentations*

Science & Engineering Center—N005

Moderator: Richard Wilk

Renewable Energy

- | | |
|-------------------------------|--|
| REBECCA DAMBERG-MAUSER | Design of a Solar Rice Drying System for Farmers in Southeast Asia |
| GUO HONG HO | Solar Powered Thermoelectric Ice Maker |
| DAVID NOYES | Rainwater Powered Micro Hydro System for a Building |
| FUYU XU | Design of a Hybrid PV/T Solar Air Heater System |
-

Science & Engineering Center—N304

Moderator: Rebecca Koopmann

Astronomy & Physics

- | | |
|--------------------------|--|
| PAUL AMY | Spectroscopy of Nearby Galaxies Using the Union College Observatory |
| RICHARD BONVENTRE | Extraction of Yields for Neutral Meson Photoproduction from the Proton and ^3He with the CLAS Detector at Jefferson Lab |
| NATHAN CALABRO | Promoting Public Participation in the Sciences: The Design of an Astronomy Museum Display |
| CHRISTIAN SHULTZ | Photoproduction of Light Mesons Using the CLAS Detector at JLab |
-

Social Sciences Building—012

Moderator: Guillermina Seri

Political Science II

- | | |
|-------------------------|--|
| LILLY BRIGER | Engaging China in the 21st Century: An Analysis of U.S.-Chinese Relations and Recommendations for the Future |
| JENNIFER DALENTA | With hope and justice for all... |
| KATRINA NEILEY | Surviving Conflict the Belgian Way |
| VARUN SHETTY | India, China, and the Politics of AIDS |

Session IV

2:00 – 3:20 p.m. *Concurrent Oral Presentations*

Social Sciences Building—014

Moderator: Sharon Gmelch

Anthropology II

REBECCA ALTNEU

The Dichotomy Between Government Rhetoric and Reality: Literacy in Costa Rica

ALEX HANDIN

Southern Louisiana Hurricane Recovery: A Photo Documentary

KAITLIN PICKETT

Race & Gender Discrepancy in Urban Public Elementary Education: A Case Study

ELIZABETH STANFORD

Growing Cricket in Tasmania

Social Sciences Building—017

Moderator: Mehmet Sener

Applied Economics

COURTNEY CHAIS

Tourism Trends and Patterns: What are the Determining Factors?

JOHN TRAVER

The Truth About Fair Trade Coffee

STEPHEN WALKER

Cashing in on School: What Factors of a High School Education Impact Future Incomes

Session V

3:30 – 5:10 p.m. Concurrent Oral Presentations

Arts Building—215

Moderator: Jennifer Matsue

The Body in Science, Media & the Arts

SHANNON DAVI	Tattooing Human Nature: A Cross-Cultural Study of Ancient World and East Asian Tattooing
NATALIE GROME	Media's Dream Body: A Comparative Study of Body Image in Latin America & the US
MEREDITH NEARPASS	Nutrition and the Female Athlete Triad
RACHEL START	Layers: Exploring the Human Structure
KIMBERLY TURECK	Autism in Scientific and Popular Media, Cinematic Portrayals, and Personal Accounts

Bailey Hall—201

Moderator: John Spinelli

A Selection of Presentations from Various Disciplines V

WENDY BEATTY	Creativity in the Engineering Design Process
ALFREDO GUEVARA	Internet Piloted Blimp
JEFF JONES	The New & Improved Thermoacoustic Organ
JESSICA RUDIN	A Statistical Analysis of Financial Aid and Matriculation Rates at Union College
SARAH YERGEAU	Suicide prevention and outreach project on the Union College campus

Bailey Hall—207

Moderator: Cay Anderson-Hanley

Neuroscience IV

THERESA FOITO	Determinants of Maintaining a High Physical Activity Level in College Students and the Elderly
SAMANTHA LIGHTCAP	The cognitive impacts of neurodegeneration on learning and related neuronal plasticity in patients with probable Alzheimer's Disease
ALISON STONE	Neuropsychological Effects of Mental Exercise for Older Adults
SARAH WESTEN	Neuropsychological Effects of Exercise for Aging Women: Role of Steroid Hormone Biomarkers

Bailey Hall—312

Moderator: Christopher Chabris

Psychology II

DIANA GOODMAN	Autism and the Brain
KATHLEEN O'CONNOR	An Overview of Savant Syndrome
KRISTEN PECHTOL	The Mozart Effect and Other Misbeliefs About Psychology
GEOFFREY RAYNOR	Self-Disclosure in Japanese and American College Students

Session V

3:30 – 5:10 p.m. Concurrent Oral Presentations

Humanities Building—014

Moderator: Anupama Jain

English Honors Thesis II

CARLY CHASIN	Live Free or Die: Women who Choose Death in Twentieth-Century American Literature and Film
REBECCA CHAWNER	“Changing the Story”: A Study of the Portrayal of Women in Twentieth-Century Irish Literature
SARAH SAMSON	Stained Glass Windows: A Collection of Poetry

Humanities Building—019

Moderator: Victoria Martinez

Border Mini-term

NATALIE AZZOLI	Important Cities on the Mexican-American Border
MALYSA CHENG	Border Mini-term
DANA GOLDSMITH	Border Mini-term
DANNA DEBLASIO	Border Mini-term
ALYSSA HOLMES	Border Mini-term
CARLY AIMI	Border Mini-term
WENDY LUKS	Maquildoras and poverty along the US/Mexican border
ROSANNY CUELLO	Maquildoras and poverty along the US/Mexican border
CAITLIN MAGUIRE	Border Mini-term
SARA MELTON	Border Mini-term
ALISON HINKATY	Border Mini-term

Humanities Building—112

Moderator: Stacie Raucci

Classics II

KENNETH FALCON	Power and Gender in Homer's Iliad
JOHN PAUL FELICIANO	A Literary Commentary on Livy's Early History of Rome and His Handling of Women
CLAIRE HENDRY	Barbarians Through the Eyes of a Roman

Olin Building—106

Moderator: J. Stephen Horton

Molecular & Cellular Biology

MICHAEL GALLAGHER	Epitope FLAG-tagging the Schizophyllum commune sugar transporter Sts1 by means of splicing by overlap extension
DIONNA KASPER	Defining the role of the sugar transporter sts1 in sexual development of the mushroom Schizophyllum commune
LEA VEDDER	Phagocyte localization and function during organismal apoptosis and regeneration in Botryllus Schlosseri
ANDREW WILKS	140kD Palladin Localization in Endothelial Cells Under Fluid Shear Stress

Session V

3:30 – 5:10 p.m. Concurrent Oral Presentations

Olin Building—115

Moderator: Ann Anderson

Aerogels

EMILY GREEN

Sol-Gel Processing of Energetic Materials Via Rapid Supercritical Extraction

SEAN MAGINESS

Hydrophobic Aerogels: Reducing Surface Drag Through Water

CALEB WATTLEY

Oil Spills and Aerogels

MICHAEL BONO

Alumina Aerogels made using Rapid Supercritical Extraction

XIAOLE XIE

The Micro-mechanical Modeling of Aerogel under Compression

Olin Building—306

Moderator: Shane Cotter

Electrical Engineering II

STEVE BODDORFF

Bass Synthesizer Interface

JOSEPH CIABURRI

Tool for Improving Non-Native French Speech Pronunciation

PETER KATLIC

Integrated Workout Shoe

GREGORY MCGRATH

Cell Phones, Barcodes, and the Cheapest Internet Prices

GREGORY MAIER

Cell Phones, Barcodes, and the Cheapest Internet Prices

Olin Building—307

Moderator: Laura MacManus-Spencer

Environmental Science & Geoscience III

SAMUEL BASTA

Calibrating recent sedimentary sequences from the proximal basin of a large glacially fed lake with hydroclimate data, Kenai Peninsula, Alaska

ERICA ERLANGER

Reconstructing the Sitka, Alaska temperature record using tree-ring widths from 8 chronologies in the Gulf of Alaska

KARA GILLIVAN

Changes on the Harding Icefield and three mountain glaciers through the 20th century

SADIE GORMAN

Bioaccumulation of ultraviolet filter chemicals in *Lumbriculus variegatus*

MONICA TSE

Photochemical degradation of UV filter chemicals in surface waters

Science & Engineering Center—N205

Moderator: David Hodgson

Mechanical Engineering

JORDAN CINELLI

Design and Construction of a Froude Scale Testing Apparatus

JEFFREY HUTCHISON

Position Control of a Fan Powered Pendulum Using a PID Controller

KARL OKESON

Fossil Fuel Addiction - How can we take steps towards the future?

CHARLES WOOD

Nanomorphology of Advanced Materials is Novel Solar Cell Design

Session V

3:30 – 5:10 p.m. Concurrent Oral Presentations

Social Sciences Building—012

Moderator: John Zumbrennen

Political Science III

ANDREW CUMMINGS	Cuba and the Soviet Union: An Island Nation's Struggle for Sovereignty
ERIC GAROFANO	Bush I, Clinton and Israel
MICHAEL STABINSKI	Privatization Potential of the United States Postal Service
JOHN TOMLIN	MeetThePrez.net
JONATHAN WILCON	American Liberty: The Theory, The Founders, and the Threats

Social Sciences Building—014

Moderator: Ashraf Ghaly

History II

ANDREW BIGNESS	Thomas More and English Anticlericalism in the Context of his Public Career
HEATHER CUNNINGHAM	The other white monks: A new approach to the Cistercian order in Yorkshire, England
KRISTIN HISSONG	Moroccan Jewry: A Historical Look at Maghrebian Immigration, Isolation, and Identity
SOPHIA SOFFERMAN	The Nile River: Egypt's Snake Shaped Gem
LAUREN YOUNGMAN	Richard III in History and Postmodern Theory

Social Sciences Building—016

Moderator: Harold Fried

From Wine to Sauce to Brakes and More: Entrepreneurship at Union College

BRITTANY ADAM	Crest Wave Energy
ALLEN PIEKARA	Crest Wave Energy
JENNA MONASTER	Entrepreneurs in a liberal arts facility? How liberal arts fuels business success
JAY SHAH	Second Breath, Inc. Presentation at National Business Plan Competition
SHANE HUBBELL	Second Breath, Inc. Presentation at National Business Plan Competition
STEPHEN VOTTO	Votto Vines Importing
STEPHEN WALKER	Rhe-Aux Technologies: Business Plan Presentation
NIRAV SHAH	Rhe-Aux Technologies: Business Plan Presentation
CARA GALLIVAN	Rhe-Aux Technologies: Business Plan Presentation
MARGARET CALLAHAN	Rhe-Aux Technologies: Business Plan Presentation

Social Sciences Building—017

Moderator: Stephen Schmidt

Topics in Economics

JOSH DEBARTOLO	The Creation of a Welcoming Engaging Destination
THOMAS HAYNES	The Wealth Effect of the Housing Market
SCOTT MORLANDO	The Economics of Disease Ecology: Lyme Disease, Habitat Management, and Cost/Benefit Analysis in the Albany Pine Bush Preserve
WALTER YUND	The Effects of Non-Renewable Energy Reserves: Price and Policy

Yulman Actors Studio

Moderator: Patricia Culbert

Performance

ZACHARY BARASH	Improvisational Theater Performance
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Session VI

12:30 – 2:00 p.m. Concurrent Oral Presentations

Reamer Campus Center

Moderator: Barbara Pytel

Poster Session

SHAZIA BAIG	Preparation and Analysis of Metal-Complex-Doped Silica Aerogels
BENJAMIN BAUER	Mexican Immigration to the U.S.: Realities, Dynamics and Debates
NATALIE BERNARDI	“You Can’t Say That!”: Situational and Individual Factors Involved in Confronting Prejudice
JUSTIN BLAU	Paint media analysis by gas chromatography mass spectroscopy and infrared spectroscopy
KATHARINE DAVIS	Involvement and Achievement in College Students
MARIA DZIALO	Mutations in Melanocortin 1 – Receptor (MC1-R) Observed in Lead Back Color Morphs of <i>Plethodon cinereus</i>
EVAN PLACE	Mutations in Melanocortin 1 – Receptor (MC1-R) Observed in Lead Back Color Morphs of <i>Plethodon cinereus</i>
ROBERT FLICK	The indefinite progress of existence and events in the past, present, and future regarded as a whole
MATTHEW FULGHUM	Steam Power: Its Past, Present, and Future Uses
NATASHA LUDWIG	Is Inference Better Than Instruction? Direct and Indirect Word Learning Strategies in Children: A look at Serial Position
IAN SOLON	The Improvement of Dehumidification Capabilities of an Air Conditioner

Visual Arts Exhibition — May 2nd and 3rd

Burns Arts Atrium Gallery • Arts Building

Drawing and Painting Exhibition

Faculty Sponsor — Walter Hatke

Natalie Azzoli
Shannon Brady
Sarah Coleman
Kelly Craparotta
Robert Eastman
Elizabeth Hart
Neena Jube
Jessie Korner
Kate MacEwan
Sarah Mueller
Annabelle Murphy
Monica Rowett
Brace Thompson
Zach Warner
Patrick Wilson

Digital Exhibition

Faculty Sponsor — Fernando Orellana

Jessica Trotter
Vit Ruzicka
Jan Novak
Jan Vratislav
Ondrej Nikel
Alexandra Lindsay
Elizabeth Culp
Katherine Cissel
Liam Cronin
Russell Goldenberg
Alexandra Lindsay
Alex Handin
Jaclyn Brick
Elisabeth Duquette
Eleanor Hazlett
Erica Finkelstein
Brandon McArdle

Sculpture Exhibition

Faculty Sponsor — Chris Duncan

Emily Burgess
Liam Cronin
Chris Foley
Allison Perse
Brace Thompson
Rachel Titcomb
Hilary Zelson
Amanda Wald
Lauren Wetherell
Wes Whitaker

Photography Exhibition

Faculty Sponsor — Professor Martin Benjamin

Megan Chiriani
Meghan Haley-Quigley
Jarid Hotaling
Stella Kyung
Tobias Leeger
Steven Leung
Lauren Muske
Elizabeth Paul
Daniel Phakos
Jonathan Scheff
Megan Sesil
Robert Shirley
Paul Stuckey

Vietnam 2007 term participants:

Natalie Bernardi
Anthony Fine
Catherine Griffin
Graham Kaplan
Michael McAndrew
Brittany Miller
Meggie Moriarty
Monica Rowett
Sarah Scott
Will Wilkins

2nd Floor Photography Gallery

Cam Berjoan
Ian Brennan
Elizabeth Culp
Robert Flick
Michelle Koo
Tobias Leeger
Charlotte Messervy
James Morton
Katherine Newingham
Frank Spendley
Rachel Start
Brendan Steiner
Rachel Tarica
Megan Weill

Printmaking, Design Fundamentals and Advanced Drawing Exhibition

Faculty Sponsor — Sandy Wimer

PRINTMAKING: RELIEF

Mia Simone
Kara Gillivan
Alexandra Lindsey
Liam Cronin
Emily Burgess
Fen Huang
Dana Katz
Pam April
David Mostrom

DRAWING II:

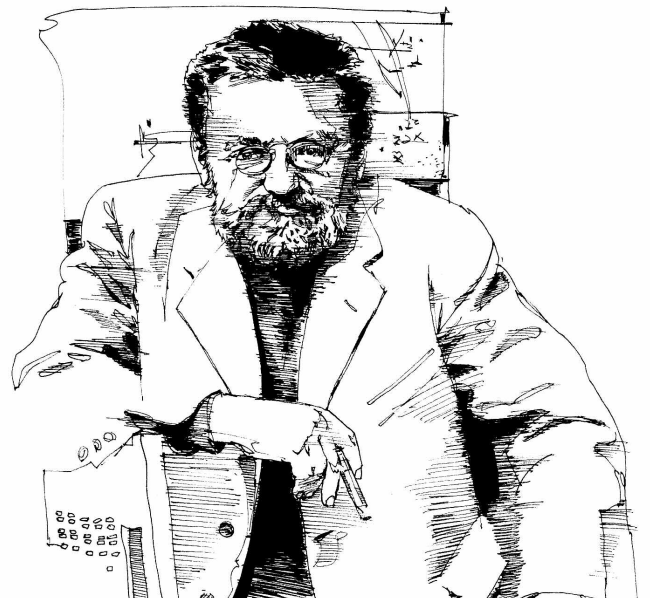
Lisa Crescenzo
Brandon McArdle
Alex Handin

DESIGN FUNDAMENTALS I:

Amanda Purner
Dolev Melamed

PRINTMAKING: ETCHING:

Michael Bono
Kelly Craparotta
Leah Jacobs



Union College Jazz Ensemble

Saturday, May 3, 2008 • 1:00-2:00 p.m.

Professor Timothy Olsen, Director

Taylor Music Center

Fred L. Emerson Foundation Auditorium

FLUTE

Marissa Gaines '10

CLARINET

Stacy Paull '10

Alex Post '11

SOPRANO SAX

Philip Sommo '11

ALTO SAX

Ed Milde '11

Matt Zawodniak '10

TENOR SAX

Greg Bloom '11

Peter Bonventre '11

Avery Gray '11

Kyle Marmelstein '08

BARI SAX

Chelsea Zantay '11

TRUMPET

Mike Gillin '08

Nick Potvin '09

Elias Samia '11

TROMBONE

Natalie Ullman '10

VIOLIN

Alex Handin '10

PIANO

Luke Bryden '09

Rie Ono '08

Tom Perry '09

GUITAR

Kyle Grimm '08

Peter MacDonald '09

BASS

William Glynn '08

DRUMSET/PERCUSSION

Andrew Donnelly '10

Will Hernandez '09

Andrew Salvo '08

VOCALS

Alex Handin '10

Will Hernandez '09

Steinmetz Concert 2008

*The Union College Choir
The Union College and Community Orchestra*

*Friday, May 2, 2008
8:00 p.m. — Memorial Chapel*

Victor Klimash, Conductor

Program

I

Russian Eater Overture **Nikolai Rimsky Korsakov**
The Union College and Community Orchestra

II

Four Passion Choruses from Messiah **George Frideric Handel**
Behold the Lamb of God
Surely He hath born our griefs
And with his stripes
All we like sheep

The Union College Choir
The Union College and Community Orchestra

Intermission

III

La Veritat? (World Premier) **Andrew Laccetti ('08)**
Apacacio de la Bellesa
Espiral Urbana

IV

Concerto No. 2 in G minor **Camille Saint Saens**
Allegro Moderato
Allegro Scherzando
Presto

Heidi Ching ('10), piano
The Union College and Community Orchestra