10TH ANNIVERSARY NYU SHANGHAI POST-DOCTORAL AND DOCTORAL RESEARCH ASSEMBLY





April 21st, 2023



Event Program Organized by the Office of Graduate and Advanced Education

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The 10th Anniversary NYU Shanghai Post-Doctoral and Doctoral Research Assembly is a full-day celebration of research that showcases the achievements and contributions of post-doctoral fellows and PhD students spanning Biology, Chemistry, Computer Science, Global Health, International Relations, Mathematics, Neural Science, Physics, Psychology, Urban Studies, Medical Anthropology, and Transportation Engineering.

This event consists of a poster exhibition in a convention hall format and plenary sessions of oral presentations with awards for Best Poster and Best Oral Presentation.

We invite public viewers to cast a vote for the posters that most impress them, and panels of NYU Shanghai faculty will select the winning oral presentations.

2. Schedule at a Glance

Time	Session			
9:30 a.m 8:00 p.m.	Public Viewing of Posters (4F East Hall) Nominations for Best Poster Awards close after the Poster Exhibition at 5:00p.m.			
1:45 p.m 3:00 p.m.	Plenary Session for Doctoral Student Oral Presentations (Classroom E403) 10 presentations of 5-minutes each, followed by private deliberation among judges over award winners (announcement of 3 award winners to be made at reception). Introduction by Dean of Graduate and Advanced Education Eric H. Mao. Open to the entire school community.			
3:00 p.m 5:00 p.m.	Poster Exhibition and Public Voting (4F East Hall) Refreshments served throughout the exhibition. Gift pick up for poster voters Open to the entire school community.			
5:00 p.m 6:00 p.m.	Plenary Session for Post-Doc Oral Presentations (Classroom E403) 8 presentations of 5-minutes each, followed by private deliberation among judges over award winners (announcement of 3 award winners to be made a reception). Introduction by Associate Provost for Research Anqi Qian. Open to the entire school community.			
6:00 p.m 7:30 p.m.	Announcement of Winners and Alumni Reception Dinner (4F East Hall) Greeting from Provost Joanna Waley-Cohen, messages from Alumni Representatives, comments from Oral Presentation Plenary Session Judges, followed by announcement of Winners and reception dinner. (Reception dinner limited to post-doctoral and PhD alumni, Research Assembly participants, and faculty advisors)			

Doctoral Student Oral Presentations



Order	Field	Presenter	Title
1	Computer Science	Tianyao Chen	Logic-Neural Sequence Modeling
2	Chemistry	Xingpin Li	Excited-state Many-Body Expansion: formalism and application to the solvatochromism of Brooker's Merocyanine Dye
3	Physics	Manish Chaudhary	Macroscopic entanglement generation in Bose- Einstein condensates and its applications in quantum information
4	Neural Science	Yuhan Lu	How the brain processes auditory and visual temporal structures of the world
5	Physics	Junjun Chu	Dynamical states of a sector plate on a thermally convecting fluid
6	Urban Studies	Meizi You	Does self-containment of urban function and urban scale promote sustainable development in new towns? Lessons from the urban heat island dynamics in Shanghai
7	Transport ation Managem ent	Yuhao Liu	Modeling temporal variation of driver supply in an electrified ride-sourcing market considering drivers' charging and resting behavior
8	Chemistry	Shiyu Hu	A computational method for stability change prediction of proteins upon mutations
9	Chemistry	Zengkui Liu	Imaginary-time open-chain path-integral approach for Fermi's golden rule rate constant
10	Biology	Xiaoai Lyu	Identification of Aneuploidy Sensing Genes in Cells

Postdoc Oral Presentations



Order	Field	Presenter	Title
1	Physics	Yizhao Zhang	How surface roughness reduces heat transport for small roughness heights in turbulent Rayleigh-Bénard convection
2	Medical Anthropology	Andrew Wortham	Collusive infrapolitics: The hidden gay worlds of HIV community based organizations in Kunming, China
3	International Relations	Bhagya Senaratne	Wedging during Crisis: Great Power and Multilateral Institution Competition during the Sri Lankan crisis
4	Physics	Zhuang Su	Total internal reflection of a vortex ring at a water-air interface
5	Psychology	Mengrun Zhang	My child and I: Self- and child-reference effects among parents with self-worth contingent on children's performance
6	Global Health	Gen Li	How does support from others protects us from depression? A network perspective
7	Mathematics	Manuel Rissel	Localized and degenerate controls for the incompressible Navier–Stokes system
8	Mathematics	Álvaro Mateos González	Odysseus and the Non-Smooth Stochastic Filtering Problem

Poster Presentations (1-9)

D: Doctoral Student P: Postdoc

Field	Presenter	Poster number	Title
Biology	Xiaoai Lyu	D-1 🌞	Identification of Aneuploidy Sensing Genes in Cells
Biology	Mahmuda Akter	P-1	Role of H2A.Z histone variant in chromosome segregation regulation and function of MPS1 kinase in H2A.Z histone phosphorylation during mitosis
Chemistry	Shiyu Hu	D-2 🌞	A computational method for stability change prediction of proteins upon mutations.
Chemistry	Xingpin Li	D-3 🌞	Excited-state Many-Body Expansion: formalism and application to the solvatochromism of Brooker's Merocyanine Dye
Chemistry	Zengkui Liu	D-4 🌞	Imaginary-time open-chain path-integral approach for Fermi's golden rule rate constant
Chemistry	Yuquan Cao	D-5	Role of electronic polarization in the primary charge- transfer states of the purple bacteria reaction center: A polarizable QM/MM study with the integral-exact direct reaction field method
Computer Science	Tianyao Chen	D-6 🌞	Logic-Neural Sequence Modeling
Global Health	Gen Li	P-2 🌞	How does support from others protects us from depression? A network perspective
International Relations	Bhagya Senaratne	P-3 🍅	Wedging during Crisis: Great Power and Multilateral Institution Competition during the Sri Lankan crisis

Poster Presentations (10-18)

D: Doctoral Student P: Postdoc

Field	Presenter	Poster number	Title
Mathematics	Manuel Rissel	P-4 🌞	Localized and degenerate controls for the incompressible Navier–Stokes system
Neural Science	Yuhan Lu	D-7 🌞	How the brain processes auditory and visual temporal structures of the world
Neural Science	Jintao Gu	D-8	Maintenance and transformation of working memory
Neural Science	Vince Sun	D-9	Hearing your voice before you speak
Physics	Junjun Chu	D-10 📥	Dynamical states of a sector plate on a thermally convecting fluid
Physics	Manish Chaudhary	D-11 🍅	Macroscopic entanglement generation in Bose-Einstein condensates and its applications in quantum information
Physics	Yizhao Zhang	P-5 🌞	How surface roughness reduces heat transport for small roughness heights in turbulent Rayleigh-Bénard convection
Physics	Zhuang Su	P-6 🌞	Total internal reflection of a vortex ring at a water-air interface
Psychology	Mengrun Zhang	P-7 🌞	My child and I: Self- and child-reference effects among parents with self-worth contingent on children's performance

Poster Presentations (19-26)

D: Doctoral Student P: Postdoc

Field	Presenter	Poster number	Title
Urban Studies	Meizi You	D-12 🌞	Does self-containment of urban function and urban scale promote sustainable development in new towns? Lessons from the urban heat island dynamics in Shanghai
Urban Studies	Tong Cheng	D-13	Megacity Growth or Urban Sprawl? Simulating Planning Policies of Turkey's Marmara Region
Urban Studies	Yichun Zhou	D-14	Can peri-urban parks mitigate environment and social equity? A case study of Tokyo using mobile phone data
Urban Studies	Yue Xiong	D-15	Toward a more healthy and equal city: how a vector- control project promotes SDGs in China
Transportation Management	Yuhao Liu	D-16 🌞	Modeling temporal variation of driver supply in an electrified ride-sourcing market considering drivers' charging and resting behavior
Transportation Management	Yanling Deng	D-17	Optimal design of a battery swapping and charging management system for electric trucks considering battery degradation
Transportation Management	Yilang Hao	D-18	Semi-autonomous Truck Platooning: A futuristic transportation mode
Transportation Management	Zhi Li	D-19	Empirical analysis of electric vehicles' charging patterns: Case study from Shanghai

4. Oral Presentation Judging Policies and Criteria

During each of the post-doctoral and doctoral oral presentation plenary sessions, a panel of 6 faculty judges will determine the three presentations that will earn the "Best Oral Presentation" awards.

Judging criteria:

Comprehension and Content

- Did the presentation provide a clear background and significance of the research question?
- Did the presentation clearly describe the research strategy/design and the results/findings of the research?
- Did the presentation clearly describe the conclusions, outcomes, and impact of the research?

Engagement and Communication

- Was the oration delivered clearly, and in language appropriate for a non-specialist audience?
- Were the PowerPoint slides clear and did they enhance the presentation?
- Did the presenter convey enthusiasm for their research, and capture and maintain the audience's attention?

Overall Impression

What was your overall impression of the rigor of the presenter's research, the diligence of the presenter's commitment to his/her work, and the potential for the research project to be taken in interesting future directions?

Judging criteria were adapted from Cornell Graduate School. Each has equal weight and all emphasize the audience.

5. Judges for Oral Presentation

<u>Plenary Session for Doctoral Student Oral Presentations</u>

Guyue (Grace) Liu, Assistant Professor of Computer Science, NYU Shanghai Jungseog Kan, Assistant Professor of Biology, NYU Shanghai Shuyang Ling, Assistant Professor of Data Science, NYU Shanghai William Glover, Assistant Professor of Chemistry at NYU Shanghai Xiang Sun, Assistant Professor of Chemistry, NYU Shanghai Zhibin Chen, Assistant Professor of Engineering, NYU Shanghai

<u>Plenary Session for Post-Doc Oral Presentations</u>

Joanna Waley-Cohen, Provost and Affiliated Professor of History, NYU Shanghai

Jia Miao, Assistant Professor of Sociology, NYU Shanghai

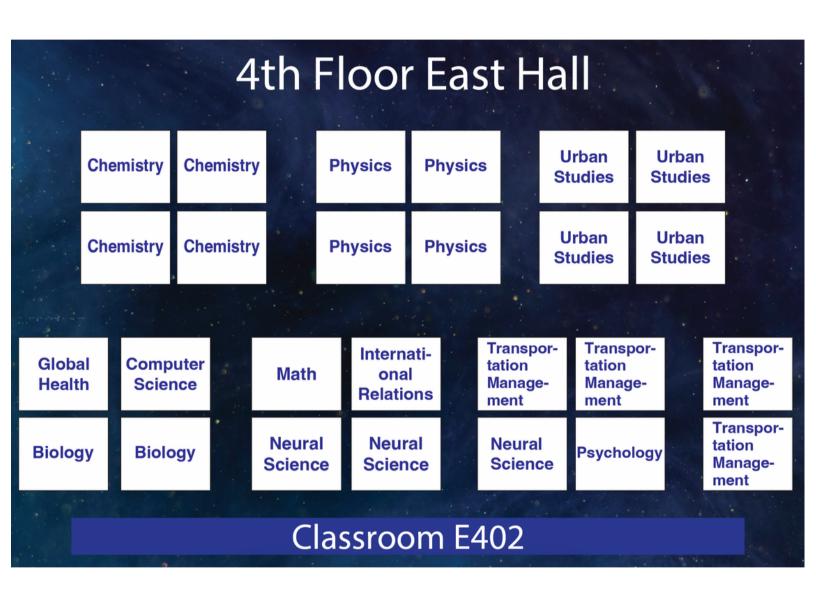
Lixian Cui, Assistant Professor of Psychology, NYU Shanghai

Mathieu Laurière, Assistant Professor of Mathematics and Data Science, NYU Shanghai

Roberto Fernandez, Professor of Practice in Mathematics, NYU Shanghai

Xing Tian, Associate Professor of Neural and Cognitive Sciences, NYU Shanghai

6. Poster Exhibition Map



7. Poster Voting Policies and Recommendations

Any poster viewer throughout the day can nominate posters for the "Best Poster" award. Poster viewers can nominate an unlimited number of posters, but they may only submit one nomination per poster. The three doctoral and three post-doctoral posters with the highest number of nominations will earn the "Best Poster" awards.

Things to consider when voting for your favorite posters:

(1) Overall Visual:

- Do you like the general looking of a poster?
- Are the components of the poster well designed and balanced across the space?

(2) Overall Content:

- Are the components of the poster organized in a
- logical flow?
- Can you understand the contents on the poster?

(3) Overall Oral:

- Did the presenter sufficiently explain the poster and
- answer questions?
- Did the presenter speak clearly and distinctly?
- Did the presenter show enthusiasm about their topic?

Please scan this QR code to vote



Post-doctoral Fellow

- Best Oral Presentation
- Best Poster

Doctoral Student

- Best Oral Presentation
- Best Poster