

# IMPS 2018

*Columbia University · New York City, New York, USA · July 9-13, 2018*

## Final Program



**COLUMBIA UNIVERSITY**

IN THE CITY OF NEW YORK



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Columbia University Campus - Photo courtesy of Billy Hathorn-Wikipedia-CC-BY-SA3.0

Dear Attendees and Guests,

Welcome to the International Meeting of the Psychometric Society (IMPS) 2018 at the Columbia University in the City of New York. As can also be seen from the impressive buildings at the campus, the university was established in 1754. It is a private Ivy League research university of great standing, and the Psychometric Society is honored by their hospitality.

New York City has an awful lot to offer: Times Square, Broadway theater productions, the Empire State Building, the Statue of Liberty, Ellis Island, and a plethora of museums and art galleries. There is so much choice that we decided to skip the traditional excursion and give attendees Thursday afternoon off to explore New York City by yourself.

The conference starts with three parallel short courses on Monday, July 9. The main conference runs from Tuesday, July 10, to Friday, July 13. The opening of the conference will take place on Tuesday at 9:00 a.m. in the Rotunda of the Low Library building. At 6:30 p.m., the welcome reception and a poster session will also take place in the Low Library.

We have arranged a variety of social events, which are listed in the program booklet and on the website. There are two events that I especially want to draw attention to. One is the Graduate Student Mixer on Monday, July 9, from 6:30 p.m. until 8:30 p.m. at the NYLO New York City in The Library Room. The second is the membership

meeting held on Wednesday at 12:00 noon, where the members of the Psychometric Society have the opportunity to be informed about and participate in the policy and activities of the society.

As you can gather from the program booklet, we have a full program, featuring eminent keynote and invited speakers. Note the highly topical symposium Meta-science and Responsible Research Practices, and no less than five symposia on the new and very promising developments in network-psychometrics.

The conference will end with the traditional awards ceremony, presidential address, and banquet on Friday.

I am convinced that we will have a fruitful exchange of scientific ideas and a wonderful time.

Regards,



Cees Glas  
IMPS Chair and President of the Psychometric Society 2018

The following full-day, pre-conference short courses will be offered on Monday, July 9, 2018, from 9:30 a.m.-5:00 p.m.:

## Workshop #1: Continuous- and Discrete-Time Dynamic Modeling in R

Presenters:



**Sy-Miin Chow,**  
Pennsylvania State  
University, State  
College, PA, USA



**Michael Hunter,**  
University of  
Oklahoma,  
Oklahoma City,  
OK, USA



**Charles Driver,**  
Max Planck  
Institute for Human  
Development,  
Berlin, Germany



**Peter Molenaar,**  
Pennsylvania State  
University, State  
College, PA, USA

## Workshop #2: Computerized Adaptive Testing and Multistage Testing with R

Presenters:



**David Magis,**  
University of Liège,  
Brussels, Belgium



**Alina A. von Davier,**  
Educational Testing  
Service, Princeton,  
NJ, USA



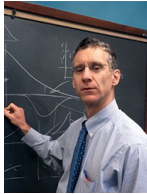
**Duanli Yan,**  
Educational Testing  
Service, Princeton,  
NJ, USA

## Workshop #3: New Matching for Causal Inference and Impact Evaluation

Presenter:



**Jose R. Zubizarreta,**  
Harvard University,  
Boston, MA, USA



**Andrew Gelman**, Columbia University, New York City, NY, USA

**The Statistical Crisis in Science and What We Can Do About It**

Tuesday, July 10, 2018, 9:15 a.m.-10:15 a.m.



**Sacha Epskamp**, University of Amsterdam, Amsterdam, The Netherlands

2018 Psychometric Society Dissertation Award Winner

**Network Psychometrics: Current State and Future Directions**

Tuesday, July 10, 2018, 5:50 p.m.-6:30 p.m.



**Kenneth A. Bollen**, University of North Carolina, Chapel Hill, NC, USA

Career Award for Lifetime Achievement

**Specify Globally, Estimate and Test Locally: A MIIV Approach to Structural Equation Models**

Wednesday, July 11, 2018, 11:00 a.m.-12:00 noon



**David Blei**, Columbia University, New York City, NY, USA

**Large-scale Probabilistic Modeling**

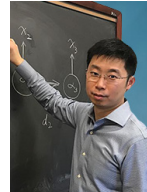
Wednesday, July 11, 2018, 1:30 p.m.-2:30 p.m.



**Robert Mislevy**, Educational Testing Service, Princeton, NJ, USA

**An Urgent Assessment Question and a Proposed Answer, With an Eye Toward Bayesian Inference**

Thursday, July 12, 2018, 8:30 a.m.-9:30 a.m.



**Jingchen Liu**, Columbia University, New York City, NY, USA

Early Career Award Winner

**An Exploration of Latent Structure in Process Data**

Friday, July 13, 2018, 2:00 p.m.-2:45 p.m.



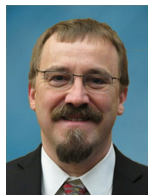
**Cees Glas**, University of Twente, Enschede, The Netherlands

Presidential Address

**Psychometric Tools for Practical Problems in Educational Measurement**

Friday, July 13, 2018, 3:45 p.m.-4:45 p.m.

## Invited Speakers



**Matthias von Davier**, National Board of Medical Examiners (NBME), Philadelphia, PA, USA

**Diagnosing Diagnostic Models: From von Neumann's Elephant to Model Equivalencies and Network Psychometrics**

Tuesday, July 10, 2018, 5:00 p.m.-5:50 p.m.



**Gerhard Tutz**, Ludwig-Maximilians-Universität, Munich, Germany

**Response Styles and Dispersion in Regression and Item Response Models**

Wednesday, July 11, 2018, 10:15 a.m.-11:00 a.m.



**David Kaplan**, University of Wisconsin, Madison, WI, USA

**An Overview of Recent Developments and Applications of Bayesian Model Averaging**

Friday, July 13, 2018, 10:15 a.m.-11:00 a.m.

## State of the Art Speakers



**James Ramsay**, McGill University, Montreal, Canada

**Watching Children Grow Taught Me All I Know**

Tuesday, July 10, 2018, 5:00 p.m.-5:50 p.m.



**Peter Molenaar**, Pennsylvania State University, State College, PA, USA

**Equivalent Dynamic Models**

Wednesday, July 11, 2018, 10:15 a.m.-11:00 a.m.



**Miriam Moerbeek**, University of Utrecht, Utrecht, The Netherlands

**Optimal Designs and Statistical Power Analysis of Studies With Multilevel Data**

Friday, July 13, 2018, 10:15 a.m.-11:00 a.m.

## INVITED SYMPOSIA

### **Individual Differences in Rankings: Aggregation, Representation, Evolution, and Prediction**

Organizers: Willem J. Heiser, Leiden University; Antonio D'Ambrosio, University of Naples Federico II

Tuesday, July 10, 2018,  
3:20 p.m.-4:50 p.m.

### **Meta-science and Responsible Research Practices**

Organizer: Jelte M. Wicherts, University of Tilburg

Thursday, July 12, 2018,  
9:45 a.m.-11:15 a.m.

### **Advanced Psychometric Modeling and Applications of Process Data Analysis in Educational Assessments**

Organizers: Kadriye Ercikan, ETS; Qiwei He, ETS

Thursday, July 12, 2018,  
11:15 a.m.-12:45 p.m.



International Affairs Building - Photo courtesy of Columbia University

*Please also consider attending any or all of these five sessions on the new important and promising development of network-psychometrics:*

### **1.1 Symposium: Cognitive Development: Network Psychometric Approaches**

Chair: Maarten Marsman

Tuesday, July 10, 2018, 11:00 a.m.-12:00 noon

### **2.1 Symposium: Psychometric Developments in JASP Chair: Don van den Bergh**

Tuesday, July 10, 2018, 1:30 p.m.-3:00 p.m.

### **4.2 Symposium: Non-Cognitive Psychometric Theory and Assessment**

Chair: Gunter Maris

Wednesday, July 11, 2018, 8:30 a.m.-10:00 a.m.

### **7.1 Symposium: Network Psychometrics 1: Advances in Network Structure Estimation**

Chair: Denny Borsboom

Thursday, July 12, 2018, 9:45 a.m.-11:15 a.m.

### **9.1 Symposium: Network Psychometrics II: Psychometric Extensions to Network Modeling**

Chair: Sacha Epskamp

Friday, July 13, 2018, 8:30 a.m.-10:00 a.m.

## **Graduate Student Mixer**

Monday, July 9: 6:30 p.m.  
Off-site Location: NYLO New York City Hotel,  
Library Room (Lobby Level)

On Monday at 6:30 p.m., a student get-together will take place at the NYLO Hotel Lobby on the Upper West Side (2178 Broadway, Manhattan, NY 10024).

This event is exclusively for graduate students and will be hosted by the Psychometric Society. As a registered student, you are welcome to join this event for complimentary appetizers and two drink tickets, plus have the opportunity to meet other students from around the world in a unique and fun atmosphere.

Note: Attendee transportation is on your own. It is recommended to use the subway. The NYLO Hotel is located between the 79th Street Subway Station (five-minute walk) and the 72th Street Subway Station (eight-minute walk).

## **Group Photo**

Tuesday, July 10: 10:20 a.m.-10:40 a.m.  
Low Library Building

Following the Opening Keynote Session, please meet promptly by 10:20 a.m. at the main entrance of the Low Library Building on the outside steps.

At 10:30 a.m., a conference-sponsored group photo will be taken. A special thank you to our group photo sponsor, Muthen & Muthen.

After the group photo, attendees can network during a refreshment break from 10:40 a.m.-11:00 a.m. in the Low Library: Faculty Room 207.

The group photo will be posted on the Society website for attendees to download after the conference.

## **Welcome to New York City Poster Session and Reception**

Tuesday, July 10, 2018, 6:30 p.m.-8:30 p.m.  
Low Library Building: Rotunda  
Low Library Building: Faculty Room 207

We will welcome you on the evening of Tuesday, July 10, at the Low Memorial Library in the Rotunda on the Columbia University Campus.

Please join the Society for a wonderful evening to welcome meeting attendees to New York City and to explore a diverse collection of research at the conference poster session. Discuss topics with your peers that are sure to pique your interest in a casual, fun, and beautiful setting. One of the most impressive features of Low Library is its rotunda, topped by the largest all-granite dome in the country.

The poster session event includes an hors d'oeuvres reception and cash bar. Authors will be standing by their posters between 6:30 p.m. and 8:30 p.m. This event is also open to meeting attendee guests at no additional charge.



## Poster Session

Poster presenters may put up their posters on Tuesday, July 10, from 3:00 p.m.-6:15 p.m., and authors must stand with their poster from 6:30 p.m.-8:30 p.m. Authors should remove their posters by 8:45 p.m. Any posters not removed after the session will be kept at the conference Registration Desk until Friday, July 13, at 12:00 noon and then will be recycled by the university.



Grand Central Station - Photo courtesy of Eric Baetscher-Wikipedia-CC-BY-SA3.0

## Closing Banquet IMPS 2018

Friday, July 13, 2018, 7:00 p.m.-9:30 p.m.

This year the closing banquet will be held at the [Princeton Club](#) of New York on Friday, July 13.

Join us at the historic Princeton Club in the heart of Manhattan for a final banquet dinner, cash bar, and networking with fellow attendees.

The event starts at 7:00 p.m. with a formal sit-down banquet dinner served at 7:15 p.m.

Your guest is also welcome to attend the banquet for an additional fee. Stop at the Society Registration Desk to inquire at least 24 hours prior to the banquet event.

Note: Guest transportation is on your own. The Princeton Club is between 5th and 6th Avenues on 43rd Street. It's by Grand Central Station, so easily accessible by metro and then less than a five-minute walk to the Princeton Club.



Manhattan - Photo courtesy of Ivan2010-Wikipedia-CC-BY-SA3.0

## Conference Venue

The conference will take place at Columbia University Campus (116th Street and Broadway, New York, NY 10027). Columbia's Morningside Heights campus is located in Manhattan and is easily accessible by car or public transportation.

[Travel information](#): car and public transportation

[Parking](#) information

[Campus map](#)  
[Visitor Center](#)

## [Campus Highlights](#)

Campus Coffee shops, Grab-n-Go Cafes, and other [dining locations](#)  
Columbia University [Local Area Emergency Information](#)

## Name Badge Policy

Conference name badges are required for entrance to all conference events.

## Registration and Information Desk

Conference Registration and information desk will be available in the International Affairs Building: Room 417 Foyer area at the Columbia University throughout the Annual Meeting, July 9 to July 13. A representative from the National Office is available to offer assistance during the conference to answer questions, renew memberships, or assist those interested in joining the Psychometric Society. You can join online [here](#).

## Hours of Operation:

Monday, July 9  
8:30 a.m.-1:30 p.m.  
(Short Course Workshops)  
Tuesday, July 10  
8:00 a.m.-5:00 p.m.  
Wednesday, July 11  
8:00 a.m.-3:15 p.m.  
Thursday, July 12  
8:00 a.m.-11:30 a.m.  
Friday, July 13  
8:00 a.m.-2:00 p.m.

## Information for Presenters

### Copies

If you plan to hand out paper copies during your presentation, you are responsible for copying and providing them at the conference. There are NO conference-sponsored copy machines for your use.

### Session Rooms

All session rooms will be equipped with an LCD video projector, PC computer, USB hub, Internet connection, audio for the computer, a projection screen, podium microphone, slide advancer, and a laser pointer. Presenters are also welcome to bring their own laptop (and with their own connection cords) to connect with the session room LCD video projector.

If you need assistance prior, during, and/or after a presentation, you may request assistance from the Society audiovisual technician team, which is on call to assist you. More details will be noted in each session room on how to contact an IMPS technician.

## Explore NYC

On Thursday, July 12, 2018, IMPS sessions will end at approximately 12:45 p.m. Since New York has so much to offer for everyone, this year attendees are free to explore and discover the city on their own. For tourism ideas, city maps, restaurants, tours, Broadway shows, shopping, events, attractions, and much more, visit [NYC The Official Guide](#).

For information about the attendee NYC discount pass and exclusive savings throughout the city at participating member restaurants and attractions, check out this [site](#).

## New York City Subway Station (Public Transportation Information)

The subway runs 24 hours a day, 7 days a week, 365 days a year. The fare to ride the subway is \$2.00 for a single ride, or there are discounts for multiple ride combinations and also unlimited fare cards for set periods. The subway system is made up of different lines that go from one terminal to another.



Photo courtesy of Manhattan Transit Authority

The NYC subway system extends to four of the five boroughs of New York City: [Manhattan](#), [Brooklyn](#), [Queens](#), and the [Bronx](#). It does not extend to [Staten Island](#), and it also does not cross the city border anywhere. Where these lines cross in the same or connected stations, you may transfer between trains. It is free to transfer at such stations.

When you enter a subway station, you are in an area that is called the mezzanine. In the mezzanine are the turnstiles and, in most cases, a token booth. There is also a large map of the entire subway system on the wall,

along with a bus map and a neighborhood map. You will also find machines where you can purchase fare cards, called [MetroCards](#). You can also buy MetroCards from the clerk in the booth. If you want your own subway map or bus map, the clerk has these in the booth. They are free, so ask for one! You can either buy a card with a set dollar amount (which you can increase by giving the clerk more money when getting low) or you can buy a card with unlimited use for a certain period of time. The cards with set values may be used by several riders, however, the unlimited use card cannot be shared and cannot be reused for up to 18 minutes.

Once you have entered the turnstile, you continue to the platform. Look at the signs that show what lines stop there and also whether that platform is for uptown or downtown trains. Keep in mind that in Manhattan, “uptown” means NORTH of where you are standing and “downtown” means SOUTH. This is important: To get to 81st Street from 125th Street, you are going south and want a downtown train. However, to get to 81st Street from [Pennsylvania Station](#), you are going north, and so to go to that same station from a different starting point you want an uptown train.

Notes: When navigating, call the trains by their names or numbers, *not* by their colors! Also, the NYC subway has both local trains (“C” or “E”) that stop at every station, and express trains (“A”) that use a different track and that skip many stations, stopping just at certain major stations.

Lastly, if you are lost, *ask* people. New Yorkers love to give directions and will give you all kinds of advice. Transit Authority employees are more reliable sources of



Central Park - Photo courtesy of Dietmar Rabich-Wikipedia-CC-BY-SA3.0

information than other passengers, but they are often busy. Your best bet always is to ask police officers assigned to the NYPD Transit Bureau (look for a TB on their right collar point), and they will be happy to assist you.

Additional subway information:  
[MTA Subway Map](#)  
[NYC Subway with bus and railroad connections](#)  
[Subway lines and services](#)  
[NYC: The official guide](#)

## Conference Meals and Receptions

The conference will provide morning and afternoon beverage service during the session breaks. The local area has several dining options within walking distance, therefore, lunch will be on your own daily. Refer to the IMPS mobile app map for the IMPS list of campus dining options, local restaurants, and/or cafes. Tuesday night from 6:30 p.m.-8:30 p.m. will feature hors d'oeuvres and a cash bar during the Welcome Poster Reception. Lastly, Friday evening is the Closing Banquet, which will be located at the Princeton Club and will feature a formal sit-down meal, and a cash bar to enjoy with fellow attendees. Please refer to the program conference schedule for the exact times and locations for each event.

## Where to Eat at Columbia

In addition to the refreshment breaks at the conference, you can buy breakfast, lunch, snacks, and drinks at coffee/grab-n-go locations on campus. Refer to the campus map in the program schedule for names and locations. Find additional information [here](#).

## Conference Attire

Business casual attire is suggested for the conference but is not mandatory. We recommend dressing in layers as some buildings may be cooler than others. This year, attendees will be walking to and from multiple buildings and concurrent session rooms, so bring comfortable walking shoes, an umbrella, and dress in layers.

## Thumb Drives containing the IMPS 2018 Program and Abstract Book

The Society has placed the IMPS 2018 program book and abstract book on a couple thumb drives for temporary use on site. These will be located at the IMPS Registration Desk to download to your personal computer.

## Automated Teller Machine (ATM)

An ATM is available in the Lerner Hall on the Columbia Campus, on the corner of 114th Street and Broadway Street.

## IMPS 2018 Mobile APP

Back by popular demand, the Psychometric Society has a conference mobile app for the IMPS 2018 Annual Meeting. Please download the “Attendify” app using iTunes (AppStore) or Google Play. Once you open the app, you will need to search for the event by entering “IMPS 2018.” Tap on the event and then “Join” to access the app. Complimentary Internet will be available on the Columbia campus, however, we suggest you download the app before you travel to the meeting site. Please also be aware of any additional data charges when using the

mobile app. Attendees will be able to access the program, abstracts, and more on this year’s app. Don’t forget to register under the Activity Stream and share your conference pictures during the week.

***We sincerely hope you have a wonderful visit to New York City, New York. Thank you for joining us at IMPS 2018!***



Columbia University campus - Photo courtesy of Beyond My Ken-Wikipedia-CC-BY-SA3.0

The Program Committee is responsible for the scientific program of the annual meeting of the Psychometric Society. Its duties include inviting speakers, short-course presenters, chairs, and organizers of invited sessions; reviewing submitted abstracts and proposals for symposia; designing the program; and providing advice and feedback on the program and abstract books. According to the bylaws, the president is the chair of the Program Committee, and the members are the immediate past president, president-elect, secretary, four regular members, and any number of adjunct members. Two regular members of the Program Committee are appointed by the president every year to serve for two years. In addition, the president may appoint, for a term of up to one year each, any number of adjunct members.

*Chair and 2018 Society President:*  
Cees Glas, University of Twente,  
The Netherlands

*Members:*  
*Immediate Past President*  
Anders Skrondal, Norwegian Institute of Public Health, Oslo, Norway & University of Oslo, Norway & University of California, Berkeley, CA, USA

*President-Elect*  
Francis Tuerlinckx, KU Leuven, Belgium

*Secretary*  
Carolyn Anderson, University of Illinois at Urbana-Champaign, IL, USA

*Regular Member (2017-2018)*  
Irimi Moustaki, London School of Economics and Political Science, UK

*Regular Members (2018-2019)*  
Ed Merkle, University of Missouri, MO, USA  
Patrick Groenen, Erasmus University, Rotterdam, The Netherlands

*Adjunct Members (2018)*  
Jingchen Liu, Columbia University, New York, USA

Matthias von Davier, National Board of Examiners, Philadelphia, PA, USA  
Sophia Rabe-Hesketh, University of California, Berkeley, CA, USA  
Willem Heiser, University of Leiden, The Netherlands



Columbia University Pupin Hall - Photo courtesy of Mikhail Klassen-Wikipedia-CC-BY-SA3.0

## **IMPS 2018 LOCAL ORGANIZING COMMITTEE:**

Dood Kalicharan, Columbia University, USA  
Jingchen Liu, Columbia University, USA  
Zhiliang Ying, Columbia University, USA  
Matthew S. Johnson, Teachers College, Columbia University, USA  
Hok Kan (Brian) Ling, Columbia University, USA

***A very special thank you to our local organizing committee members and the Department of Statistics at Columbia University for all their hard work this year.***

## **Thank you also to our IMPS 2018 Volunteers:**

Guanhua Fang, Columbia University, USA  
Xueying Tang, Columbia University, USA  
Zhi Wang, Columbia University, USA  
Haochen Xu, Fudan University, China  
Shun Xu, Columbia University, USA  
Chaoyu Yuen, Columbia University, USA  
Susu Zhang, Columbia University, USA  
Siliang Zhang, Fudan University, China  
Haoran Zhang, Fudan University, China  
Yishan Ding, University of Maryland, USA  
Yi Feng, University of Maryland, USA  
Tessa Johnson, University of Maryland, USA  
Yan (Simon) Sun, Rutgers University, USA  
Weimeng Wang, University of Maryland, USA  
Xiaoliang Zhou, Teachers College, Columbia University, USA  
Yihan Zhao, Teachers College, Columbia University, USA

Tianyang (Terry) Zhang, Teachers College, Columbia University, USA  
Naglula Fleurant, Teachers College, Columbia University, USA  
Xiang Liu, Teachers College, Columbia University, USA

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**For more information about the Psychometric Society or membership, contact the Psychometric Society Association Management Company:**

The Rees Group, Inc.  
2424 American Lane  
Madison, WI 53704  
Telephone: 608-268-4712  
Fax: 608-443-2474  
Email: [info@psychometricsociety.org](mailto:info@psychometricsociety.org)

# IMPS Registration Hours of Operation: International Affairs Building 417 Foyer (4th floor) Page 16

Time	Day
8:30 a.m.–1:30 p.m.	Monday, July 9, 2018
8:00 a.m.–5:00 p.m.	Tuesday, July 10, 2018
8:00 a.m.–3:15 p.m.	Wednesday, July 11, 2018
8:00 a.m.–11:30 a.m.	Thursday, July 12, 2018
8:00 a.m.–2:00 p.m.	Friday, July 13, 2018

## Monday, July 9

Time	Room Pupin 329 (3rd floor)	Room Mudd 833 (8th floor)	Room Fayerweather 310 (3rd floor)
9:30 a.m.	<b>SHORT COURSE 1:</b> <i>Continuous- and Discrete-Time Dynamic Modeling in R</i> Sy-Miin Chow; Michael Hunter; Charles Driver; Peter Molenaar	<b>SHORT COURSE 2:</b> <i>Computerized Adaptive Testing and Multistage Testing with R</i> David Magis; Duanli Yan; Alina A. von Davier	<b>SHORT COURSE 3:</b> <i>New Matching for Causal Inference and Impact Evaluation</i> Jose R. Zubizarreta

10:30 a.m.–10:45 a.m.

Short Course Refreshment Break: Schermerhorn Plaza Courtyard

11:30 a.m.–1:00 p.m.

Attendee Lunch (on your own)

3:00 p.m.–3:15 p.m.

Short Course Refreshment Break: Schermerhorn Plaza Courtyard

5:00 p.m.

End of Short Courses

6:30 p.m.–8:30 p.m.

STUDENT MIXER - Off-Site Location: NYLO New York Hotel, Library Room (Lobby Level)

## Tuesday, July 10—Morning

Time	Room Low Library: Rotunda
9:00 a.m.–9:15 a.m.	<b>Welcome</b> Cees Glas, President of the Psychometric Society
9:15 a.m.–10:15 a.m.	<b>Keynote Speaker:</b> Andrew Gelman <i>The Statistical Crisis in Science and What We Can Do About It</i> Chair: Anders Skrondal

10:20 a.m.–10:40 a.m.

GROUP PHOTO - Low Library Steps (outside)

10:30 a.m.–11:00 a.m.

REFRESHMENT BREAK - Low Library: Faculty Room 207



# Tuesday, July 10—Morning: Parallel Sessions

Time	Room International Affairs Building 417 (4th floor)	Room Schermerhorn 501 (5th floor)	Room Northwest Corner Building 501 (5th floor)
11:00 a.m.–12:00 noon	1.1 - <i>Symposium 1: Cognitive Development: Network Psychometric Approaches</i> Chair: Maarten Marsman	1.2 - <i>Symposium 2: Multi-stage Estimation and Inference in Measurement Modeling</i> Chairs: Yang Liu; Ji Seung Yang	1.3 - <i>Bayesian Statistical Inference</i> Chair: Jean-Paul Fox
	Benjamin Deonovic 1.1A - ASSESSMENT MEETS LEARNING: ON THE RELATION BETWEEN IRT AND BKT	Monica Morell 1.2A - REPLENISHING THE GRIT SCALE USING RESTRICTED RECALIBRATION	Yinghan Chen 1.3A - A MULTIVARIATE PROBIT MODEL FOR LEARNING TRAJECTORIES WITH APPLICATION TO CLASSROOM ASSESSMENT
	Maarten Marsman 1.1B - POLYA-YULE NETWORKS AND CONTAGION IN COGNITIVE DEVELOPMENT	Marian Strazzeri 1.2B - IRT ANALYSIS IN LONGITUDINAL RANDOMIZED CONTROLLED TRIALS	Xiang Liu 1.3B - BAYESIAN NONPARAMETRIC ORDERED LATENT CLASS MODELS
	Alexander Savi 1.1C - A NETWORK THEORY OF DEVELOPMENTAL INTELLIGENCE	Chun Wang 1.2C - CORRECTION FOR IRT THETA MEASUREMENT ERROR IN LINEAR MIXED MODELS	Albert Man 1.3C - A HIERARCHICAL BAYESIAN COGNITIVE DIAGNOSTIC FACTOR MODEL FOR LEARNING TRAJECTORIES
	Lourens Waldorp 1.1D - MECHANISMS AND DYNAMICS OF DEVELOPMENT	Xi Wang 1.2D - A TWO-STAGE PROCEDURE TO DETECT COMPROMISED ITEMS	Inés Varas 1.3D - A LATENT VARIABLE REPRESENTATION APPROACH FOR SCORE DISTRIBUTIONS IN TEST EQUATING
	Shuangshuang Xu 1.2E - IRT SCORE PROJECTION VIA CALIBRATION AND RESTRICTED RECALIBRATION	Jean-Paul Fox 1.3E - ADVANCEMENTS AND OPPORTUNITIES IN MARGINAL ITEM RESPONSE MODELING	

# Tuesday, July 10—Morning: Parallel Sessions, continued

Time	Room Pupin 428 (4th floor)	Room Mudd 833 (8th floor)	Room Pupin 329 (3rd floor)	Room Fayerweather 310 (3rd floor)
11:00 a.m.–12:00 noon	1.4 - <i>Classification, Clustering, and Latent Class Analysis</i> Chair: Marie Wiberg	1.5 - <i>Model Fit, Comparison, and Diagnostics</i> Chair: Ed Merkle	1.6 - <i>Longitudinal Data Analysis</i> Chair: Charles Driver	1.7 - <i>Structural Equation Modeling</i> Chair: Eva Ceulemans
	Yuqi Gu 1.4A - PARTIAL IDENTIFIABILITY OF COGNITIVE DIAGNOSIS MODELS	Mauricio Garnier-Villarreal 1.5A - ADAPTING FIT INDICES FOR BAYESIAN SEM: COMPARISON TO MAXIMUM LIKELIHOOD	Meng Chen 1.6A - MODEL SELECTION IN CONTINUOUS-TIME DYNAMICAL SYSTEMS MODELS WITH TIME-VARYING PARAMETERS	Yajing Zhu 1.7A - EXTENDING THE 3-STEP APPROACH TO A MULTILEVEL STRUCTURAL EQUATION MODEL
	Charles Iaconangelo 1.4B - LATENT TRANSITION ANALYSIS WITH THE ORDINAL DINA MODEL AND COVARIATES	Aaron Myers 1.5B - POSTERIOR PREDICTIVE MODEL COMPARISON OF TWO PERFORMANCE ASSESSMENT SCORING METHODS	Anja Ernst 1.6B - DISENTANGLING INDIVIDUAL DYNAMICS - PROBABILISTIC CLUSTERING OF LONGITUDINAL DATA	Fien Gistelink 1.7B - MODELING LONGITUDINAL DYADIC DATA IN THE SEM FRAMEWORK
	Auburn Jimenez 1.4C - A DISJUNCTIVE REFORMULATION OF THE REDUCED REPARAMETERIZED UNIFIED MODEL	Sandip Sinharay 1.5C - HIGHER-ORDER ASYMPTOTICS AND ITS APPLICATION TO TEST FRAUD DETECTION	Tanja Lischetzke 1.6C - MODELING INTRAINDIVIDUAL VARIABILITY USING A HIERARCHICAL MIXTURE LATENT MARKOV MODEL	Paul Lodder 1.7C - MODELING INTERACTIONS BETWEEN LATENT VARIABLES
	Kevin Carl Santos 1.4D - APPLICATION OF GAUSSIAN COPULA DISTRIBUTION TO THE DINA MODEL	Yating Zheng 1.5D - THE MODEL FIT OF CONDITIONALLY INDEPENDENT DYAD (CID) MODELS	Ruitao Liu 1.6D - ESTIMATING STUDENT GROWTH PERCENTILE UNDER INEQUALITY RESTRICTIONS	Keith Markus 1.7D - FORMATIVE MEASUREMENT THEORY: THREE CONCEPTUAL IMPEDIMENTS TO PROGRESS
		Satoshi Usami 1.6E - RANDOM TIME ERRORS IN GROWTH CURVE MODELING	Jay Verkuilen 1.7E - USING GENERALIZED STRUCTURAL EQUATION MODELING IN AGREEMENT: A UNIFIED FRAMEWORK	

# Tuesday, July 10—Afternoon: 1st Parallel Sessions

Time	Room International Affairs Building 417 (4th floor)	Room Schermerhorn 501 (5th floor)	Room Northwest Corner Building 501 (5th floor)	Room Pupin 428 (4th floor)
1:30 p.m.–3:00 p.m.	2.1 - <i>Symposium 3: Psychometric Developments in JASP</i> Chair: Don van den Bergh 2.1D Chair: Eric-Jan Wagenmakers	2.2 - <i>Symposium 4: Identifying Specific and Distinctive Factors: Exploratory Bi-factor Modeling and Beyond</i> Chair: Marieke E. Timmerman	2.3 - <i>Bayesian Statistical Inference</i> Chair: Steven Culpepper	2.4 - <i>Classification, Clustering, and Latent Class Analysis</i> Chair: Dylan Molenaar
	Adela-Maria Isvoranu 2.1A - NETWORK ANALYSIS IN JASP	Kim De Roover 2.2A - UNRAVELING THE MIX: FACTOR LOADING NON-INVARIANCE ACROSS MANY GROUPS	Minho Kwak 2.3A - DIRICHLET PRIORS FOR LATENT DIRICHLET ANALYSIS OF CONSTRUCTED RESPONSE ITEMS	Yuan-Pei Chang 2.4A - A GENERAL NONPARAMETRIC CD-CAT ALGORITHM FOR SMALL EDUCATIONAL PROGRAMS
	Johnny van Doorn 2.1B - BAYESIAN LATENT NORMAL INFERENCE FOR THE RANK SUM TEST, THE SIGNED RANK TEST, AND KENDALL'S TAU	Eduardo Garcia-Garzon 2.2B - IMPROVING BI-FACTOR EXPLORATORY MODELING: FACTOR LOADINGS DIFFERENCE-BASED EMPIRICAL TARGET ROTATION	Jorge Tendeiro 2.3B - ELABORATING ON ISSUES WITH BAYES FACTORS	Stephen France 2.4B - OVERLAPPING CLUSTERING: A FRAMEWORK, SOFTWARE, AND EMPIRICAL ANALYSIS
	Alexandra Sarafoglou 2.1C - BAYESIAN MULTINOMIAL TEST FOR INFORMED HYPOTHESES	Marieke Timmerman 2.2C - EXPLORATORY ROTATION WITH (BLOCKWISE) BIFACTOR SIMPLIMAX	Edgar Merkle 2.3C - BAYESIAN MODEL ASSESSMENT: USE OF CONDITIONAL VS MARGINAL LIKELIHOODS	Xin Qiao 2.4C - COMPARING CLASSIFICATION METHODS FOR RESPONSE DATA AND PROCESS DATA
	Don van den Bergh 2.1D - USING CONTRASTS TO TEST INFORMED HYPOTHESES IN MULTIDIMENSIONAL IRT	Marlies Vervloet 2.2D - RETRIEVING RELEVANT COMPONENTS IN DYADIC INTERACTIONS	Lieke Voncken 2.3D - USING PRIOR INFORMATION FOR MORE EFFICIENT NORM ESTIMATION	Kang Xue 2.4D - DETERMINE ATTRIBUTE PROFILE FOR DIAGNOSTIC COGNITIVE MEASUREMENT USING GENERATOR-EVALUATOR-NETWORK (GEN)
	Eric-Jan Wagenmakers 2.1E - POSTERIOR DISTRIBUTIONS FOR RELIABILITY MEASURES	Katrijn Van Deun 2.2E - FINDING THE HIDDEN LINK: SPARSE COMMON AND DISTINCTIVE COMPONENT ANALYSIS		

# Tuesday, July 10—Afternoon: 1st Parallel Sessions, continued

Time	Room Mudd 833 (8th floor)	Room Pupin 329 (3rd floor)	Room Fayerweather 310 (3rd floor)	Notes
1:30 p.m.–3:00 p.m.	2.5 - <i>Item Response Theory</i> Chair: Alina von Davier	2.6 - <i>Item Response Theory</i> Chair: Eric Schuler	2.7 - <i>Validity and Reliability</i> Chair: Jelte Wicherts	
	Terry Ackerman 2.5A - MODIFYING THE PROJECTIVE IRT MODEL TO REPRESENT A LATENT ABILITY COMPOSITE	Tianyang Zhang 2.6A - MISSING VALUE IMPUTATION FOR BAYESIAN IRT MODEL	Richard Artner 2.7A - REPRODUCIBILITY: THE ELEPHANT IN THE ROOM?	
	Mia Müller-Platz 2.5B - LATENT VARIABLE FREE MULTIDIMENSIONAL ITEM RESPONSE MODELS	Qimin Liu 2.6B - T-TEST AND ANOVA FOR DATA WITH CEILING AND FLOOR EFFECTS	Aline Claesen 2.7B - PREREGISTRATION: COMPARING DREAM TO REALITY	
	Ken Fujimoto 2.5C - A BAYESIAN MULTILEVEL TRIFACTOR IRT MODEL FOR SMALL SAMPLES	Jing Lu 2.6C - MODELING NONIGNORABLE MISSING FOR NOT-REACHED ITEMS INCORPORATING ITEM RESPONSE TIMES	Shuo (Selena) Wang 2.7C - DOES LOW RELIABILITY LEAD TO A LOW REPLICATION RATE OF STUDY RESULTS?	
	Brooke Magnus 2.5D - COMPARING APPROACHES TO MODELING ZERO INFLATION IN OPEN-ENDED FREQUENCY DATA	Laura Lu 2.6D - SEM APPROACH TO CCA WITH MISSING VALUES?		
	Brian Gin 2.5E - A DYADIC ITEM RESPONSE THEORY MODEL	Eric Schuler 2.6E - PLANNED MISSING DATA APPROACH FOR MEASURE DEVELOPMENT: REDUCING PARTICIPANT BURDEN		

# Tuesday, July 10—Afternoon: 2nd Parallel Sessions

Time	Room International Affairs Building 417 (4th floor)	Room Schermerhorn 501 (5th floor)	Room Northwest Corner Building 501 (5th floor)	Room Pupin 428 (4th floor)
3:20 p.m.–4:50 p.m.	3.1 - <i>Symposium 5: Modeling Intensive Longitudinal Data: Perks and Pitfalls</i> Chair: Laura Bringmann	3.2 - <i>Symposium 6: Individual Differences in Rankings: Aggregation, Representation, Evolution, and Prediction</i> Chairs: Willem J. Heiser; Antonio D'Ambrosio	3.3 - <i>Causal Inference and Mediation</i> Chair: Joost Van Ginkel	3.4 - <i>Classification, Clustering, and Latent Class Analysis</i> Chair: Edward Ip
	Markus Eronen 3.1A - INTERVENTIONISM AND WITHIN-PERSON CAUSES IN PSYCHOLOGY	José Luis Garcia-Lapresta 3.2A - WEIGHTED AGGREGATION OF ORDINAL AND CARDINAL DATA	Haeike Josephy 3.3A - LOWER-LEVEL MEDIATION IN BINARY SETTINGS	Guoguo Zheng 3.4A - A MIXED MEMBERSHIP RASCH MODEL
	Cara Arizmendi 3.1B - SPECIFYING EXOGENEITY AND BILINEAR EFFECTS IN DATA DRIVEN MODEL SEARCHES	Antonio D'Ambrosio 3.2B - ORDINAL UNFOLDING OF PREFERENCE RANKINGS USING THE KEMENY DISTANCE	Jee-Seon Kim 3.3B - FIXED VERSUS RANDOM EFFECTS MODELS FOR MULTILEVEL PROPENSITY SCORE ANALYSIS	Josine Verhagen 3.4B - TOWARDS MULTIDIMENSIONAL LONGITUDINAL LEARNER PROFILES, A DYNAMIC BAYESIAN NETWORK APPROACH
	Noémi Schuurman 3.1C - MULTILEVEL DYNAMIC TWIN MODELING	Elja Aryas 3.2C - RANKINGS VARYING IN TIME: A BAYESIAN APPROACH	Rui Lu 3.3C - DATA-BASED COVARIATE SELECTION FOR HIGH DIMENSION LOW SAMPLE SIZE DATA	Gabriela Stegmann 3.4C - IDENTIFYING DIVERGENT NONLINEAR GROWTH TRAJECTORIES USING RECURSIVE PARTITIONING
	Laura Bringmann 3.1D - NETWORK MODELS FOR CLINICAL PRACTICE?	Mariangela Sciandra 3.2D - DISTANCE-BASED DECISION TREES FOR RANKING DATA: THE ROLE OF THE WEIGHT SYSTEMS	Sierra Bainter 3.3D - IDENTIFYING RELEVANT PREDICTORS IN MESSY PSYCHOLOGICAL DATA	Kazuhiro Yamaguchi 3.4D - A HYBRID COGNITIVE DIAGNOSTIC MODEL

# Tuesday, July 10—Afternoon: 2nd Parallel Sessions, continued

Time	Room Mudd 833 (8th floor)	Room Pupin 329 (3rd floor)	Room Fayerweather 310 (3rd floor)	Notes
3:20 p.m.–4:50 p.m.	3.5 - <i>Item Response Theory</i> Chair: Qiwei He	3.6 - <i>Multilevel/Hierarchical/Mixed Models</i> Chair: Javier Revuelta	3.7 - <i>Validity and Reliability</i> Chair: Patrick Shrout	
	Scott Monroe 3.5A - COMPUTING EXPECTED FISHER INFORMATION FOR ADVANCED IRT MODELS	Luciana Cançado 3.6A - DOMINANCE ANALYSIS FOR DETERMINING PREDICTOR IMPORTANCE IN LONGITUDINAL MULTILEVEL MODELS	Francesca Teora 3.7A - A COMPARISON OF RELIABILITY GENERALIZATION METHODS	
	Maxwell Hong 3.5B - ROBUST ESTIMATION FOR ITEM RESPONSE THEORY	Sun-Joo Cho 3.6B - DYNAMIC GLMMS WITH CROSSED RANDOM EFFECTS: AN APPLICATION TO INTENSIVE BINARY TIME-SERIES EYE TRACKING DATA	Rabia Karatoprak Ersen 3.7B - DEPENDABILITY OF DIFFERENCE SCORES OF STUDENTS, CLASSES, AND SITES	
	Meina Bian 3.5C - SELECTING PRIORS UNDER THE 2PL AND 3PL ITEM RESPONSE MODELS	Ehri Ryu 3.6C - ANALYSIS OF CHANGE WITH TWO TIME POINTS	Björn Andersson 3.7C - ESTIMATION OF IRT RELIABILITY WITH MULTIPLE LATENT OR OBSERVED GROUPS	
	Meng-I Chang 3.5D - INVESTIGATING HYPERPRIORS FOR MODELING THE INTERTRAIT CORRELATIONS IN MIRT MODELS	Nicholas Sim 3.6D - ESTIMATING RANDOM INTERCEPT MODELS WITH CLUSTER-ENDOGENOUS COVARIATES	Hynek Cigler 3.7D - CROSS-CULTURAL SCALE COMPARABILITY USING PARTIAL-BY-ITEM AND COUNTRY INVARIANCE ANALYSIS	
4:50 p.m.–5:00 p.m.	BREAK			

# Tuesday, July 10—Evening

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Time	Room	Room
5:00 p.m.–5:50 p.m.	International Affairs Building 417 (4th floor)	Pupin 301 (3rd floor)
	<b>Invited Speaker:</b> <b>Matthias von Davier</b> <i>Diagnosing Diagnostic Models: From von Neumann's Elephant to Model Equivalencies and Network Psychometrics</i> Chair: Matthew Johnson	<b>State of the Art Speaker:</b> <b>James Ramsay</b> <i>Watching Children Grow Taught Me All I Know</i> Chair: Willem Heiser
Time	Room	
5:50 p.m.–6:30 p.m.	International Affairs Building 417 (4th floor)	
	<b>Dissertation Prize:</b> <b>Sacha Epskamp</b> <i>Network Psychometrics: Current State and Future Directions</i> Chair: Terry Ackerman	

6:30 p.m.–8:30 p.m.

Welcome Reception and Poster Session – Low Library: Rotunda



Low Library - Photo courtesy of Marco Almbauer-Wikipedia-CC-BY-SA3.0

# Wednesday, July 11—Morning: Parallel Sessions

Time	Room International Affairs Building 417 (4th floor)	Room Schermerhorn 501 (5th floor)	Room Northwest Corner Building 501 (5th floor)	Room Pupin 428 (4th floor)
8:30 a.m.–10:00 a.m.	4.1 - <i>Symposium 7: Recent Advances in the Analysis of Complex Data Structures</i> Chair: Silvia Bianconcini	4.2 - <i>Symposium 8: Non-Cognitive Psychometric Theory and Assessment</i> Chair: Gunter Maris	4.3 - <i>Computer-Based Testing</i> Chair: John Donoghue	4.4 - <i>Measurement Invariance and DIF</i> Chair: Matthias von Davier
	Marco Alfó 4.1A - ON FINITE MIXTURES OF REGRESSION MODELS FOR LONGITUDINAL RESPONSES AND OMITTED COVARIATES BIAS	Han L.J. van der Maas 4.2A - THE ISING MODEL OF ATTITUDES	Mario Luzardo 4.3A - USE OF THE NONPARAMETRIC ISOTONIC MODEL IN CAT	Guan-Yu Chen 4.4A - USING NLMM TO DETECT THE NON-UNIFORM AND UNIFORM DIFS
	Silvia Bianconcini 4.1B - INFERENCE BASED ON DIMENSION-WISE QUADRATURE FOR THE ANALYSIS OF MULTIDIMENSIONAL LONGITUDINAL DATA	Gunter Maris 4.2B - A FREE ENERGY THEORY OF CREATIVE THINKING	Kyosuke Bunji 4.3B - EXTENDING THE DIFFUSION-IRT MODEL TO FORCED-CHOICE RESPONSE TIME DATA	Adéla Drabinová 4.4B - DETECTION OF DIFFERENTIAL ITEM FUNCTIONING WITH DIFNLR PACKAGE
	Valentina Sansivieri 4.1C - BI-FACTOR MIRT OBSERVED-SCORE EQUATING UNDER THE NEAT DESIGN	Lu Ou 4.2C - THE MATHEMATICS OF COLLABORATION: INSIGHTS FROM GAME THEORY AND MATHEMATICAL BIOLOGY	Christopher Doble 4.3C - RELIABILITY OF AN ADAPTIVE ASSESSMENT BASED ON KNOWLEDGE SPACE THEORY	Ricardo Primi 4.4C - ACQUIESCENCE AND PERSON DIFFERENTIAL FUNCTIONING: SOLVING PDFIF WITH BALANCED SCALES
	Paolo Giordani 4.1D - MODEL-BASED AND FUZZY CLUSTERING ALGORITHMS: A COMPARATIVE ASSESSMENT	Vanessa Simmering 4.2D - A CROSS-DISCIPLINARY LOOK AT NONCOGNITIVE ASSESSMENTS	Yu-Lan Su 4.3D - APPLYING HIGHER ORDER MODELS TO IMPROVE CAT ADAPTIVE LEARNING ALGORITHMS	Ya Zhang 4.4D - DETECTION OF LATENT DIF USING MIXTURE IRT MODELS
			Michael Hunter 4.4E - LINKING SCALES WITHOUT COMMON ITEMS	

# Wednesday, July 11—Morning: Parallel Sessions, continued

Time	Room Mudd 833 (8th floor)	Room Pupin 329 (3rd floor)	Room Fayerweather 310 (3rd floor)	Notes
8:30 a.m.–10:00 a.m.	4.5 - <i>Item Response Theory</i> Chair: Thorsten Meiser	4.6 - <i>Multilevel/Hierarchical/Mixed Models</i> Chair: Karl Schweizer	4.7 - <i>Model Fit, Comparison, and Diagnostics</i> Chair: Yanhoung Bian	
	Daniel Bolt 4.5A - A MODEL-BASED EMPIRICAL COMPARISON OF DISCRETE OPTION AND TRADITIONAL MULTIPLE-CHOICE ITEMS	Han Du 4.6A - TESTING VARIANCE COMPONENTS IN LINEAR MIXED MODELING USING PERMUTATION	Jorge González 4.7A - REVISITING THE STATISTICAL ASSUMPTIONS IN TUCKER EQUATING	
	Zhuangzhuang Han 4.5B - TWO MODIFIED STATISTICS FOR $S-X^{\wedge}2$	Zijun Ke 4.6B - A BETTER CORRECTION FOR UNRELIABILITY FOR META-ANALYSES	Paul Jewsbury 4.7B - VALIDATING TEST SCORES AGAINST A FALLIBLE CRITERION	
	Xue Zhang 4.5C - A MODIFIED $S-X^2$ FOR DICHOTOMOUS IRT MODELS WITH MISSING DATA	Jason Rights 4.6C - QUANTIFYING EXPLAINED VARIANCE IN MULTILEVEL MODELS: AN INTEGRATIVE FRAMEWORK OF R-SQUARED MEASURES	Dongmei Li 4.7C - MEASUREMENT ERROR, RELIABILITY, AND PREDICTIVE ACCURACY OF HIGHEST SCORES	
	Katherine Castellano 4.5D - THE IMPACT OF BIB SPIRALING ON LOCAL DEPENDENCE DETECTION STATISTICS	Ting Wang 4.6D - COMPARING LINEAR MIXED MODELS WITH NON-NESTED RANDOM EFFECTS	Tyler Matta 4.7D - HOW TEST BLUEPRINTS AND MEASUREMENT MODELS IMPACT SUBSCORE VALUE	
Leah Feuerstahler 4.5E - METRIC RECOVERY IN IRT SIMULATION STUDIES		Yanhong Bian 4.7E - CLASSIFICATION ACCURACY FOR NONPARAMETRIC CLASSIFICATION APPROACHES IN COGNITIVE DIAGNOSIS		

# Wednesday, July 11—Morning

10:00 a.m.–10:15 a.m.

REFRESHMENT BREAKS - Schermerhorn Plaza Courtyard (upper campus buildings) and Wien Plaza Courtyard (International Affairs Building location)

Time	Room Pupin 301 (3rd floor)	Room International Affairs Building 417 (4th floor)
10:15 a.m.–11:00 a.m.	<b>State of the Art Speaker:</b> Peter Molenaar <i>Equivalent Dynamic Models</i> Chair: Daniel Bolt	<b>Invited Speaker:</b> Gerhard Tutz <i>Response Styles and Dispersion in Regression and Item Response Models</i> Chair: Ulf Bockenholt
11:00 a.m.–12:00 noon	<b>Career Award for Lifetime Achievement:</b> Kenneth A. Bollen <i>Specify Globally, Estimate and Test Locally: A MIV Approach to Structural Equation Models</i> Chair: Sophia Rabe-Hesketh	
12:00 noon–12:30 p.m.	<b>Meeting of Members</b>	

# Wednesday, July 11—Afternoon

12:30 p.m.–1:30 p.m.

Attendee Lunch (on your own)

Time	Room International Affairs Building 417 (4th floor)
1:30 p.m.–2:30 p.m.	<b>Keynote Speaker:</b> David Blei <i>Large-Scale Probabilistic Modeling</i> Chair: Klaas Sijtsma

2:30 p.m.–3:00 p.m.

REFRESHMENT BREAKS - Schermerhorn Plaza Courtyard (upper campus buildings) and Wien Plaza Courtyard (International Affairs Building location)



NYC and Central Park - courtesy Martin St-Amant-Wikipedia-CC-BY-SA3.0

# Wednesday, July 11—Afternoon: 1st Parallel Sessions

Time	Room International Affairs Building 417 (4th floor)	Room Schermerhorn 501 (5th floor)	Room Northwest Corner Building 501 (5th floor)	Room Pupin 428 (4th floor)
3:00 p.m.–4:30 p.m.	5.1 - <i>Symposium 9: Timely Perspectives on Dynamic Models for Time Series and Panels</i> Chairs: Eva Ceulemans; Janne Adolf	5.2 - <i>Symposium 10: Advances in Cognitive Diagnostic Assessment</i> Chair: Yunxiao Chen	5.3 - <i>Computer-Based Testing</i> Chair: David Magis	5.4 - <i>Measurement Invariance and DIF</i> Chair: David Hessen
	Charles Driver 5.1A - UNDERSTANDING THE TIME COURSE OF INTERVENTIONS VIA CONTINUOUS TIME MODELING	Hyeon-Ah Kang 5.2A - TWO-TIER LATENT TRAIT MODELS FOR COGNITIVE DIAGNOSIS	Johan Braeken 5.3A - ASYMMETRY IN FIXED-PRECISION M-CAT: MULTIDIMENSIONAL SELECTION VERSUS MARGINAL STOPPING	Rudolf Debelak 5.4A - THE MANY FLAVORS OF SCORE-BASED TESTS FOR DIFFERENTIAL ITEM FUNCTIONING
	Julian Karch 5.1B - GAUSSIAN PROCESS PANEL MODELING R PACKAGE GPPM	Xiaoou Li 5.2B - JOINT MAXIMUM LIKELIHOOD ESTIMATION FOR HIGH-DIMENSIONAL EXPLORATORY ITEM RESPONSE ANALYSIS	Ya-Hui Su 5.3B - INVESTIGATING THE ITEM SELECTION METHODS IN VARIABLE-LENGTH CD-CAT	Thorben Huelmann 5.4B - A COMPARISON OF ANCHOR METHODS FOR DETECTING DIF IN MULTIPLE GROUPS
	Jedelyn Cabrieto 5.1C - TAILORING KERNEL CHANGE POINT DETECTION TO CAPTURE ABRUPT AUTOCORRELATION SHIFTS	Xueying Tang 5.2C - A REINFORCEMENT LEARNING APPROACH TO PERSONALIZED LEARNING RECOMMENDATION SYSTEM	Chunxin (Ann) Wang 5.3C - EXPLORING A NEW RESCORING METHOD FOR FLAWED ITEMS IN CAT	Armi Lantano 5.4C - COMPARING DIFFERENTIAL DISTRACTOR FUNCTIONING DETECTION METHODS UNDER THE NESTED LOGIT MODELING FRAMEWORK
	Janne Adolf 5.1D - SCALING TIME IN AUTOREGRESSIVE MODELS	Gongjun Xu 5.2D - IDENTIFIABILITY OF RESTRICTED LATENT CLASS MODELS	Zhuoran Wang 5.3D - DERIVING STOPPING RULES FOR ADAPTIVE RATER MONITORING	Samantha Robinson 5.4D - LOCALIZED ITEM RESPONSE THEORY (LIRT): DETECTING REGIONAL DIFFERENCES IN ITEM FUNCTIONALITY
	Susu Zhang 5.2E - A JOINT MIXTURE LEARNING MODEL FOR RESPONSES AND RESPONSE TIMES			

# Wednesday, July 11—Afternoon: 1st Parallel Sessions, continued

Time	Room Mudd 833 (8th floor)	Room Pupin 329 (3rd floor)	Room Fayerweather 310 (3rd floor)	Notes
3:00 p.m.–4:30 p.m.	5.5 - <i>Item Response Theory</i> Chair: Lale Khorramdel-Ameri	5.6 - <i>Multivariate Analysis</i> Chair: Steffi Pohl	5.7 - <i>Applications</i> Chair: Gunter Maris	
	Lawrence DeCarlo 5.5A - A MODEL FOR TRUE-FALSE EXAMS BASED ON SIGNAL DETECTION THEORY	Jolien Cremers 5.6A - ONE DIRECTION? ON THE MODELING OF CIRCULAR DATA IN PSYCHOLOGY	Dmitry Abbakumov 5.7A - MEASURING STUDENT'S PROFICIENCY IN MOOCs: MULTIPLE ATTEMPTS EXTENSIONS FOR THE RASCH MODEL	
	Yu-Wei Chang 5.5B - AN IRT TREE MODEL WITH NOT-ALL-DISTINCT LEAVES FOR NON-RESPONSE MODELING	Roberta Falcone 5.6B - SUPERVISED CLASSIFICATION WITH MATRIX SKETCHING	Xiaofeng Yu 5.7B - USING CPA-BASED WEIGHTED RESIDUAL METHOD TO DETECT CARELESSNESS	
	Evan Olson 5.5C - A MULTILEVEL TESTLET MODEL FOR RESPONSE AND RESPONSE TIME	Gwonen Shieh 5.6C - POWER ANALYSIS FOR ANCOVA DESIGNS	Rong Jin 5.7C - RAPID GUESSING IN TECHNOLOGY-ENHANCED ITEM	
	Peter Halpin 5.5D - PSYCHOMETRIC MODELS OF SMALL GROUP COLLABORATIONS: TOWARDS A GENERAL THEORY		Luis Eduardo Garrido 5.7D - AN EVALUATION OF WORDING EFFECTS MODELING UNDER THE ESEM FRAMEWORK	
Seock-Ho Kim 5.5E - A TAXONOMY OF ITEM RESPONSE MODELS IN PSYCHOMETRIKA				

# Wednesday, July 11—Afternoon: 2nd Parallel Sessions

Time	Room International Affairs Building 417 (4th floor)	Room Schermerhorn 501 (5th floor)	Room Northwest Corner Building 501 (5th floor)	Room Pupin 428 (4th floor)
4:30 p.m.–6:00 p.m.	6.1 - <i>Symposium 11: The History of Psychometrics</i> Chair: Willem Heiser	6.2 - <i>Symposium 12: Novel Approaches to Dealing with Heterogeneity in Meta-Analysis</i> Chair: Jelte M. Wicherts	6.3 - <i>Computer-Based Testing</i> Chair: Johan Braeken	6.4 - <i>Estimation and Computation Methods</i> Chair: Eric-Jan Wagenmakers
	Lisa D. Wijsen 6.1A - THE HISTORY OF PSYCHOMETRICS: AN ACADEMIC GENEALOGY	Suzanne Jak 6.2A - RANDOM-EFFECTS META-ANALYTIC STRUCTURAL EQUATION MODELING WITH MAXIMUM LIKELIHOOD ESTIMATION	Chunyan Liu 6.3A - COMPARISON OF TWO ITEM PREKNOWLEDGE DETECTION METHODS USING RESPONSE TIME	Ian Campbell 6.4A - A RESIDUAL EQUIVALENCE TEST FOR MIIV-2SLS ESTIMATION
	Klaas Sijtsma 6.1B - HISTORY AND FUTURE OF PSYCHOMETRICS IN THE NETHERLANDS	Esther Maassen 6.2B - REPRODUCIBILITY OF PSYCHOLOGICAL META-ANALYSES: CODING ERRORS, OUTLIERS, AND HETEROGENEITY	Sangbeak Ye 6.3B - BAYESIAN MASTERY PROMOTION OF MULTIPLE ATTRIBUTES WITH RESPONSE TIMES	Chuchu Cheng 6.4B - THE UNCERTAINTY OF NUISANCE PARAMETER IN POWER AND SAMPLE SIZE CALCULATION
	David Thissen 6.1C - L.L. THURSTONE'S "PSYCHOMETRIC LABORATORY"	Jelte M. Wicherts 6.2C - NOVEL APPROACHES TO DEALING WITH HETEROGENEITY IN META-ANALYSES	Georgios Fellouris 6.3C - STATISTICALLY EFFICIENT MASTERY-BASED LEARNING	Shaobo Jin 6.4C - HIGHER-ORDER ACCURATE APPROXIMATIONS FOR LATENT VARIABLE MODELS
	Denny Borsboom 6.1D - FROM PSYCHOLOGICAL THEORIES TO PSYCHOMETRIC TOOLS	Robbie van Aert 6.2D - CORRECTING FOR PUBLICATION BIAS IN A META-ANALYSIS WITH P-UNIFORM*	San Verhaverf 6.3D - INCREASING COMPARATIVE JUDGMENT EFFICIENCY: A REFERENCE-BASED ALGORITHM FROM CAT RESEARCH	Jan Philipp Nolte 6.4D - PRECISION OF POWER COMPUTATIONS FOR PSEUDO EXACT OR CONDITIONAL TESTS
		Xinru Li 6.2E - R-PACKAGE METACART: A FLEXIBLE TOOL FOR META-ANALYSIS WITH MULTIPLE MODERATORS	Xiaying Zheng 6.3E - COMPARING SELF-REPORTED PERSEVERANCE WITH BEHAVIORS INFERRED FROM PROCESS DATA	

# Wednesday, July 11—Afternoon: 2nd Parallel Sessions, continued

Time	Room Mudd 833 (8th floor)	Room Pupin 329 (3rd floor)	Room Fayerweather 310 (3rd floor)	Notes
4:30 p.m.–6:00 p.m.	6.5 - <i>Item Response Theory</i> Chair: Peter Halpin	6.6 - <i>Network Analysis</i> Chair: Han L.J. van der Maas	6.7 - <i>Applications</i> Chair: Selena Wang	
	Dandan Liao 6.5A - SPEED-ACCURACY-DIFFICULTY INTERACTION IN JOINT MODELING OF RESPONSES AND RESPONSE TIME	Nadja Bodner 6.6A - A NETWORK APPROACH TO BINARY TIME SERIES DATA	Sheri Kim 6.7A - THE INS AND OUTS OF EFFECT SIZES: EFFECT SIZE CLASSIFICATION	
	Chia-Ling Hsu 6.5B - THE MIXTURE RESPONSE TIME MODEL FOR DETECTING UNEXPECTED RAPID-GUESSING BEHAVIORS	Iris Yocarini 6.6B - A LONGITUDINAL NETWORK: ASSESSING STUDY TIME ALLOCATION USING EMA	Hsiu-Ting Yu 6.7B - QUANTIFYING AND EVALUATING INTERVENTION EFFECTS IN SINGLE-CASE EXPERIMENTAL DESIGNS	
	Vivian Chan 6.5C - DETECTING ABERRANT RATING SCALE RESPONSES USING CHANGE POINT ANALYSIS	Tracy Sweet 6.6C - A LATENT SPACE MODEL FOR SOCIAL INFLUENCE	Joost Van Ginkel 6.7C - USING MULTIPLE IMPUTATION TO BALANCE UNBALANCED DESIGNS FOR TWO-WAY ANALYSIS OF VARIANCE	
	Alex Brodersen 6.5D - CHANGE POINT ANALYSIS FOR DETECTION OF BACK RANDOM RESPONDING	Stella Kim 6.6D - A STRONG TRUE-SCORE MODEL FOR MULTIDIMENSIONAL TESTS		
Mirka Henninger 6.5E - SEPARATING TRAIT AND VARYING THRESHOLDS IN RESPONSE STYLE IRT MODELS				



# Thursday, July 12—Morning

Time	Room
8:30 a.m.–9:30 a.m.	<p data-bbox="753 118 1060 146">International Affairs Building 417 (4th floor)</p> <p data-bbox="842 160 971 189"><b>Keynote Speaker:</b> <b>Robert Mislevy</b></p> <p data-bbox="612 192 1201 221"><i>An Urgent Assessment Question and a Proposed Answer, with an Eye Toward Bayesian Inference</i> Chair: Susan Embretson</p>
9:30 a.m.–9:45 a.m.	REFRESHMENT BREAKS - Schermerhorn Plaza Courtyard (upper campus buildings) and Wien Plaza Courtyard (International Affairs Building location)



Photo courtesy of Columbia University

# Thursday, July 12—Morning: 1st Parallel Sessions

Time	Room International Affairs Building 417 (4th floor)	Room Schermerhorn 501 (5th floor)	Room Northwest Corner Building 501 (5th floor)
9:45 a.m.–11:15 a.m.	7.1 - <i>Symposium 13: Network Psychometrics 1: Advances in Network Structure Estimation</i> Chair: Denny Borsboom	7.2 - <i>Invited Symposium 14: Meta-science and Responsible Research Practices</i> Chair: Jelte M. Wicherts	7.3 - <i>Computer Based Testing</i> Chair: Dmitry Belov
	Joran Jongerling 7.1A - GGM ESTIMATION USING THE BAYESIAN LASSO	Samantha Anderson 7.2A - RECOVERING FROM A CRISIS OF CONFIDENCE: DESIGNING AND CONDUCTING EFFECTIVE REPLICATION STUDIES	Yang Du 7.3A - UTILIZING RESPONSE TIME IN ON-THE-FLY MULTISTAGE ADAPTIVE TESTING
	Anna Wysocki 7.1B - ON TUNING PARAMETER SELECTION FOR ESTIMATING NETWORK MODELS	Patrick Shrout 7.2B - CONCEPTUAL EFFECT SIZE ANALYSIS AND THE DESIGN OF SMALL N STUDIES WITH ADEQUATE POWER	Zhuoran Wang 7.3B - HEURISTIC ASSEMBLY OF A CLASSIFICATION MULTISTAGE TEST WITH TESTLETS
	Nitin Bhushan 7.1C - COMPARING CONSTRAINT-BASED CAUSAL DISCOVERY ALGORITHMS	Jelte Wicherts 7.2C - RESEARCHER DEGREES OF FREEDOM: PROBLEMS AND SOLUTIONS	Timo Bechger 7.3C - CONCERNING THE ANALYSIS OF MULTI-STAGE DATA
	Donald Williams 7.1D - ESTIMATING PSYCHOLOGICAL NETWORKS WITH THE BAYESIAN BOOTSTRAP	Blakeley McShane 7.2D - ABANDON STATISTICAL SIGNIFICANCE	Qi Diao 7.3D - A TWO-LEVEL ADAPTIVE TEST BATTERY
Jonas Haslbeck 7.1E - MODERATED NETWORK MODELS			

# Thursday, July 12—Morning: 1st Parallel Sessions, continued

Time	Room Pupin 428 (4th floor)	Room Mudd 833 (8th floor)	Room Pupin 329 (3rd floor)
9:45 a.m.–11:15 a.m.	7.4 - <i>Estimation and Computational Methods</i> Chair: Samantha Bouwmeester	7.5 - <i>Item Response Theory</i> Chair: Yunxiao Chen	7.6 - <i>Principal Components and Correspondence Analysis</i> Chair: Victoria Savalei
	Ge Jiang 7.4A - FACTOR ANALYSIS OF ORDINAL DATA VIA RIDGE METHOD	April Cho 7.5A - GAUSSIAN VARIATIONAL ESTIMATION FOR MIRT	Joseph Grochowalski 7.6A - ASSESSING INFERENCE ACCURACY FROM SAMPLED CORRESPONDENCE ANALYSIS SOLUTIONS
	Elena Geminiani 7.4B - SPARSE MULTIGROUP FACTOR ANALYSIS	David Hessen 7.5B - A PRINCIPAL COMPONENT SOLUTION OF A GENERALIZED PARTIAL CREDIT MODEL	Zhengguo Gu 7.6B - REGULARIZED SIMULTANEOUS COMPONENT ANALYSIS FOR JOINT ANALYSIS OF MULTIBLOCK DATA
	Minami Hattori 7.4C - EXPLORATORY FACTOR ANALYSIS WITH SPARSE CORRELATION MATRICES	Susan Embretson 7.5C - EXPLANATORY ITEM RESPONSE THEORY MODELS: IMPACT ON VALIDITY AND TEST DEVELOPMENT?	Pieter Kroonenberg 7.6C - 3WAYPACK: A MENU-DRIVEN PROGRAM SUITE FOR THREE-WAY ANALYSIS
	Henghsiu Tsai 7.4D - CONSTRAINED FACTOR MODELS WITH APPLICATIONS	Jonathan Park 7.5D - TO $\Theta$ , OR NOT TO $\Theta$ : A SIMULATION STUDY ON THE VALIDITY OF IRT	Rosaria Lombardo 7.6D - DIMENSION NUMBER FOR VARIANTS OF THREE-WAY CORRESPONDENCE ANALYSIS
Naoto Yamashita 7.4E - A NEW FACTOR ANALYSIS PROCEDURE CONSTRAINED BY LAYERED SIMPLE STRUCTURE	Tom Benton 7.5E - THE EFFECT OF USING PRINCIPAL COMPONENTS TO CREATE PLAUSIBLE VALUES	Michel van de Velden 7.6E - JOINT DIMENSION REDUCTION AND CLUSTER ANALYSIS OF MIXED DATA	

# Thursday, July 12—Morning: 2nd Parallel Sessions

Time	Room International Affairs Building 417 (4th floor)	Room Schermerhorn 501 (5th floor)	Room Northwest Corner Building 501 (5th floor)
11:15 a.m.–12:45 p.m.	8.1 - Symposium 15: Modeling Response Times in Large-Scale Assessments <i>Chairs: Hyo Jeong Shin; Lale Khorramdel</i>	8.2 - Invited Symposium 16: Advanced Psychometric Modeling and Applications of Process Data Analysis in Educational Assessments <i>Chair: Kadriye Ericikan</i>	8.3 - Classification, Clustering, and Latent Class Analysis <i>Chair: Maria Bolsinova</i>
	Lale Khorramdel 8.1A - RELATING RESPONSE TIMES AND RESPONSE STYLES USING MIXTURE IRTREE MODELS	Kadriye Ericikan 8.2A - PROCESS DATA IN ADVANCING MEASUREMENTS AT ETS	Yinyin Chen 8.3A - BEYOND THE Q-MATRIX: A GENERAL APPROACH TO COGNITIVE DIAGNOSTIC MODELS
	Hyo Jeong Shin 8.1B - MIXTURE MODELS FOR RESPONSE ACCURACY AND CATEGORIZED RESPONSE TIMES	Christopher R. Agard 8.2B - PROCESS DATA IN LARGE-SCALE K-12 ASSESSMENTS: PERSPECTIVE FROM NAEF	Jimmy de la Torre 8.3B - DO I COMPLETE Q?
	Dylan Molenaar 8.1C - RESPONSE MIXTURE MODELING: ACCOUNTING FOR HETEROGENEITY IN ITEM CHARACTERISTICS ACROSS RESPONSE TIMES	Hongwen Guo 8.2C - PROCESS DATA IN ESSAY WRITING	Bor-Chen Kuo 8.3C - A MULTIPLE CATEGORY COGNITIVE DIAGNOSTIC MODEL FOR SIMULTANEOUSLY IDENTIFYING SKILLS AND MISCONCEPTIONS
	Steffi Pohl 8.1D - DISENTANGLING MISSINGNESS DUE TO LACK OF SPEED FROM MISSINGNESS DUE TO QUITTING	Yi-Hsuan Lee 8.2D - ANALYSIS OF TIMING DATA IN A SIMULATION-BASED INTERACTIVE TASK	Dmitry Belov 8.3D - STUDY OF CHARACTERISTICS OF TEST COLLUSION GRAPH
	Konrad Klotzke 8.1E - MARGINAL JOINT RESPONSE MODELING OF RESPONSE ACCURACY AND RESPONSE TIMES	Qiwei He 8.2E - PREDICTIVE FEATURE GENERATION AND SELECTION FROM PROCESS DATA IN LARGE SCALE ASSESSMENTS	Zhihui Fu 8.3E - A COPULA MODEL FOR RESIDUAL DEPENDENCY IN COGNITIVE DIAGNOSTIC MODELS

# Thursday, July 12—Morning: 2nd Parallel Sessions, continued

Time	Room Pupin 428 (4th floor)	Room Mudd 833 (8th floor)	Room Pupin 329 (3rd floor)
11:15 a.m.–12:45 p.m.	8.4 - Estimation and Computational Methods <i>Chair: Samantha Anderson</i>	8.5 - Item Response Theory <i>Chair: Carl Francis Falk</i>	8.6 - Resampling and Simulation Techniques <i>Chair: Duanli Yan</i>
	Tim Loossens 8.4A - A NONLINEAR DYNAMICAL MODEL OF AFFECT	Stefano Noventa 8.5A - ON A GENERALIZATION OF LOCAL INDEPENDENCE IN ITEM RESPONSE THEORY	Sopiko Gvaladze 8.6A - A RESAMPLED-BASED METHOD FOR OUTLYING VARIABLE DETECTION
	Mohan Pant 8.4B - THE THIRD-ORDER POLYNOMIAL TRANSFORMATIONS OF STUDENT'S T-DISTRIBUTION	Elise Cromptvoets 8.5B - ADAPTIVE PAIRWISE COMPARISON IN EDUCATION	Denise Reis Costa 8.6B - TEST-TAKING MOTIVATION IN INTERNATIONAL SURVEYS: AN IRT APPROACH
	Maria-Pia Victoria-Feser 8.4C - SIMULATION BASED ESTIMATION AND INFERENCE FOR GLLVM	Lennart Schneider 8.5C - VUONG TESTS FOR MODEL SELECTION OF MIRT MODELS	Olga Kunina-Habenicht 8.6C - IMPACT OF ITEM POSITION EFFECTS ON RESPONSE TIMES IN SURVEYS
	Ginette Lafit 8.4D - HIGHLY CORRELATED FACTORS: DIMENSIONALITY ASSESSMENT USING CANONICAL CORRELATION ANALYSIS	Juan Li 8.5D - TESTGARDENER: A PROGRAM FOR OPTIMAL SCORING AND GRAPHICAL ANALYSIS	
	Carl Francis Falk 8.5E - MODEL SELECTION FOR MONOTONIC POLYNOMIAL ITEM RESPONSE MODELS		

# Friday, July 13—Morning: 1st Parallel Sessions

Time	Room International Affairs Building 417 (4th floor)	Room Schermerhorn 501 (5th floor)	Room Northwest Corner Building 501 (5th floor)	Room Pupin 428 (4th floor)
8:30 a.m.–10:00 a.m.	9.1 - <i>Symposium 17: Network Psychometrics II: Psychometric Extensions to Network Modeling</i> Chair: Sacha Epskamp	9.2 - <i>Measurement Invariance and DIF</i> Chair: Anton Beguin	9.3 - <i>Validity and Reliability</i> Chair: Elise Dusseldorp	9.4 - <i>Estimation and Computational Methods</i> Chair: Maarten Marsman
	Gabriela Lunansky 9.1A - BOUNCING BACK FROM ADVERSITY: A DYNAMICAL CONCEPTUALIZATION OF PSYCHOLOGICAL RESILIENCE	Hui-Fang Chen 9.2A - DETECTING DIFFERENTIAL ITEM FUNCTIONING FROM THE MULTI-PROCESS APPROACH	Hongling Wang 9.3A - NEW METHOD FOR DETECTION OF TEST COLLUSION AMONG MULTIPLE EXAMINEES	Ping Chen 9.4A - NEW EFFICIENT AND PRACTICABLE ADAPTIVE DESIGNS FOR CALIBRATING ITEMS ONLINE
	Yunxiao Chen 9.1B - A FUSED LATENT AND GRAPHICAL COX MODEL FOR MULTITYPE RECURRENT EVENTS	Fredrik Helland-Riise 9.2B - SECULAR CHANGES IN FLUID INTELLIGENCE OF NORWEGIAN ADOLESCENTS: A RANDOM DIF APPROACH	Anne Traynor 9.3B - GAUGING UNCERTAINTY IN TEST-TO-CURRICULUM ALIGNMENT INDICES	Merijn Mestdagh 9.4B - PREPAID PARAMETER ESTIMATION WITHOUT LIKELIHOODS
	Sacha Epskamp 9.1C - NETWORK-BASED ADAPTIVE ASSESSMENT	Kevin Krost 9.2C - COMPARISON OF DIF DETECTION METHODS USING THE C-RUM MODEL	James Penny 9.3C - EXAMINATION QUALITY: MERGING RELIABILITY AND VALIDITY	Nicholas Rockwood 9.4C - ESTIMATING CROSS-CLASSIFIED ITEM RESPONSE MODELS USING THE MH-RM ALGORITHM
	Hudson Golino 9.1D - DIMENSIONALITY ASSESSMENT ON INTENSIVE LONGITUDINAL DATA USING EXPLORATORY GRAPHICAL VAR	Daniella Rebouças 9.2D - DIF EFFECT SIZE MEASURES	Bunga Citra Pratiwi 9.3D - EFFECTS OF RELIABILITY ON INCREMENTAL VALIDITY: A STATISTICAL LEARNING PERSPECTIVE	David Navarro-González 9.4D - CONTROLLING THE IMPACT OF RESPONSE BIASES: AN FA-BASED APPROACH
	Pia Tio 9.1E - SPARSE NETWORK AND COMPONENT (SNAC) MODEL FOR INTEGRATING MULTI-SOURCE DATA	Çiğdem Akin Arıkan 9.2E - THE EFFECT OF DIF ON MINI AND MIDI ANCHOR TEST		

# Friday, July 13—Morning: 1st Parallel Sessions, continued

Time	Room Mudd 833 (8th floor)	Room Pupin 329 (3rd floor)	Room Fayerweather 310 (3rd floor)	Notes
8:30 a.m.–10:00 a.m.	9.5 - <i>Item Response Theory</i> Chair: Bernard Veldkamp	9.6 - <i>Structural Equation Modeling</i> Chair: Inini Moustaki	9.7 - <i>Applications</i> Chair: Denny Borsboom	
	Jack DiTrapani 9.5A - MODELING EXTREME RESPONSE STYLES IN BEHAVIORAL GENETICS USING IRTREES	Wen Qu 9.6A - GENERATION OF MULTIVARIATE NON-NORMAL RANDOM NUMBERS WITH SPECIFIED MULTIVARIATE MEASURES	Qiwei He 9.7A - EXPLORING RELATIONSHIP BETWEEN PROBLEM SOLVING SEQUENCE PATTERNS AND BACKGROUND VARIABLES	
	Juyeon Lee 9.5B - A THRESHOLD FOR DETECTING INATTENTIVE RESPONSE BEHAVIOR USING MIXTURE IRT	Esther Beierl 9.6B - DIAGNOSTIC ACCURACY OF BARTLETT SCORE ESTIMATES FROM A MISSPECIFIED SEM	Kenneth Wilcox 9.7B - A BAYESIAN HIDDEN TOPIC MARKOV MODEL FOR LATENT LINGUISTIC STRUCTURE	
	Walter Leite 9.5C - A COMPARISON OF MODELS FOR CONTROL OF RESPONSE STYLES IN ORDINAL ITEMS	Po-Hsien Huang 9.6C - POST-SELECTION INFERENCE IN STRUCTURAL EQUATION MODELING	Lynne Schofield 9.7C - USING RESPONSE TIME DATA TO MODEL COGNITION AND COGNITIVE DECLINE	
	Thorsten Meiser 9.5D - CONFIRMATORY IRT (REE) MODELS FOR ANALYZING THE DYNAMICS OF RESPONSE-STYLE EFFECTS	Yasuo Miyazaki 9.6D - EFFECT OF MEASUREMENT RELIABILITY ON PRETEST-POSTTEST DESIGN ANALYSIS	Hye-Jeong Choi 9.7D - AN APPLICATION OF A TOPIC MODEL TO CONSTRUCTED RESPONSES IN FORMATIVE ASSESSMENTS	
	Renske Kuijpers 9.5E - TESTING WITHIN-CLASS DISTRIBUTIONS IN MIXTURES OF RESPONSES AND RESPONSE TIME			

10:00 a.m.–10:15 a.m. REFRESHMENT BREAKS - Schermerhorn Plaza Courtyard (upper campus buildings) and Wien Plaza Courtyard (International Affairs Building location)

Time	Room Pupin 301 (3rd floor)	Room International Affairs Building 417 (4th floor)
10:15 a.m.–11:00 a.m.	<p><b>State-of-the-Art Speaker:</b>  <b>Miriam Moerbeek</b>  <i>Optimal Designs and Statistical Power Analysis of Studies with Multilevel Data</i>                      Chair: Sophia Rabe-Hesketh</p>	<p><b>Invited Speaker:</b>  <b>David Kaplan</b>  <i>An Overview of Recent Developments and Applications of Bayesian Model Averaging</i>                      Chair: David Thissen</p>



Lower Manhattan from Jersey City - Courtesy of King of Hearts/ Wikimedia Commons/CC-BY-SA-3.0

# Friday, July 13—Morning: 2nd Parallel Sessions

Time	Room International Affairs Building 417 (4th floor)	Room Schermerhorn 501 (5th floor)	Room Northwest Corner Building 501 (5th floor)
11:00 a.m.–12:30 p.m.	10.1 - <i>Symposium 18: Modeling Response Times and Response Processes</i> Chair: Maria Bolsinova	10.2 - <i>Item Response Theory</i> Chair: Silvia Cagnone	10.3 - <i>Classification, Clustering, and Latent Class Analysis</i> Chair: Jimmy de la Torre
	Maria Bolsinova 10.1A - MODELS FOR HINT USE IN ADAPTIVE LEARNING SYSTEMS	Tyler Strachan 10.2A - USING PROJECTIVE IRT AS A METHOD FOR VERTICAL SCALING	Manqian Liao 10.3A - INCORPORATING ITEM FEATURES INTO COGNITIVE DIAGNOSIS MODELING WITH RESPONSE TIMES
	Joost Kruis 10.1B - ITEM RESPONSE PROCESSES IN THE PAIRWISE EXCHANGE MODEL		Irina Grabovsky 10.3B - CUT-SCORES THAT MINIMIZE ULTIMATE CLASSIFICATION ERROR IN TEST BATTERIES
	Zhaojun Li 10.1C - RELATIONSHIP BETWEEN PLANNING AND EXECUTION: WHAT HAPPENS ON RESPONSE LEVEL?	Richard Feinberg 10.2C - WHAT DO YOU GET WHEN MIXING PROFILE ANALYSIS AND LOCAL EQUATING?	Hans Friedrich Koehn 10.3C - ADDITIVE TREES FOR FITTING THREE-WAY (MULTIPLE SOURCE) PROXIMITY DATA
Abe Hofman 10.1D - AN URN-SCHEME TO TRACK ACCURACY AND RESPONSE TIMES IN LEARNING ENVIRONMENTS	Anton Béguin 10.2D - USING ITEM DIFFICULTY LEVEL TO LINK ASSESSMENTS OVER TIME	Matthew Madison 10.3D - A LONGITUDINAL AND POLYTOMOUS DIAGNOSTIC CLASSIFICATION MODEL	

# Friday, July 13—Morning: 2nd Parallel Sessions, continued

Time	Room Pupin 428 (4th floor)	Room Mudd 833 (8th floor)	Room Pupin 329 (3rd floor)
11:00 a.m.–12:30 p.m.	10.4 - <i>Model Fit, Comparison, and Diagnostics</i> Chair: Wicher Bergsma	10.5 - <i>Longitudinal Data Analysis</i> Chair: Josine Verhagen	10.6 - <i>Structural Equation Modeling</i> Chair: Esther Beierl
	Wes Bonifay 10.4A - INTERPRETATION OF GENERAL AND SPECIFIC FACTORS IN THE BIFACTOR MODEL	Samantha Bouwmeester 10.5A - POWER AND TYPE I ERROR RATES IN SINGLE CASE DESIGNS	Holmes Finch 10.6A - EQUIVALENCE TESTING FOR FACTOR INVARIANCE ASSESSMENT WITH CATEGORICAL INDICATORS
	Seungwon Chung 10.4B - LIMITED INFORMATION GOODNESS-OF-FIT TESTING OF DCMS FOR POLYTOMOUS ITEMS	Maria de Fátima Salgueiro 10.5B - PLANNED MISSING DESIGNS: EFFECTS ON LATENT GROWTH CURVE MODELS	Keke Lai 10.6B - ESTIMATING STANDARDIZED SEM PARAMETERS GIVEN INCORRECT MODEL AND NONNORMAL DATA
	Aminat Egberongbe 10.4C - DETECTING PERSON MISFIT AND ABILITY ESTIMATES USING PERSON FIT STATISTIC	Yadira Peralta 10.5C - BIVARIATE MIXED-EFFECTS MODELS FOR SEGMENTED TRAJECTORIES	Tim Fabian Schaffland 10.6C - COMPARISON OF A NON-PARAMETRIC FACTOR SCORE ESTIMATOR WITH TRADITIONAL METHODS
Youn Seon Lim 10.4D - TESTING THE CONDITIONAL INDEPENDENCE AND DIMENSIONALITY OF NONPARAMETRIC COGNITIVE DIAGNOSIS MODELS		Johan Vegelius 10.6D - ESTIMATION OF NONLINEAR STRUCTURAL EQUATION MODELS WITH ORDINAL DATA	

12:30 p.m.–2:00 p.m.	ATTENDEE LUNCH (on your own)
Time	Room International Affairs Building 417 (4th floor)
2:00 p.m.–2:45 p.m.	<p><b>Early Career Award:</b>  <b>Jingchen Liu</b>  <i>An Exploration of Latent Structure in Process Data</i>                      Chair: Hua Hua Chang</p>
2:45 p.m.–3:00 p.m.	REFRESHMENT BREAK - Wien Plaza Courtyard
3:00 p.m.–3:45 p.m.	<p><b>AWARDS CEREMONY</b>                      Chair: Francis Tuerlinckx</p>
3:45 p.m.–4:45 p.m.	<p><b>Presidential Address:</b>  <b>Cees Glas</b>  <i>Psychometric Tools for Practical Problems in Educational Measurement</i>                      Chair: Francis Tuerlinckx</p>
7:00 p.m.–9:30 p.m.	CONFERENCE BANQUET RECEPTION - Off-Site Location: The Princeton Club of New York



NYC night shot - Photo courtesy of Dmitry Avdeev-Wikipedia-CC-BY-SA-3.0

**IMPS 2018 Buildings: Outlined in RED** →

**Keynote & Invited Speaker Sessions Rooms:**

Low Library: Rotunda (Tuesday, July 10, AM only)

International Affairs Building 417

Pupin 301

**Parallel Sessions Rooms:**

International Affairs Building 417

Schermerhorn 501

Northwest Corner Building 501

Pupin 428

Mudd 833






Pupin 329

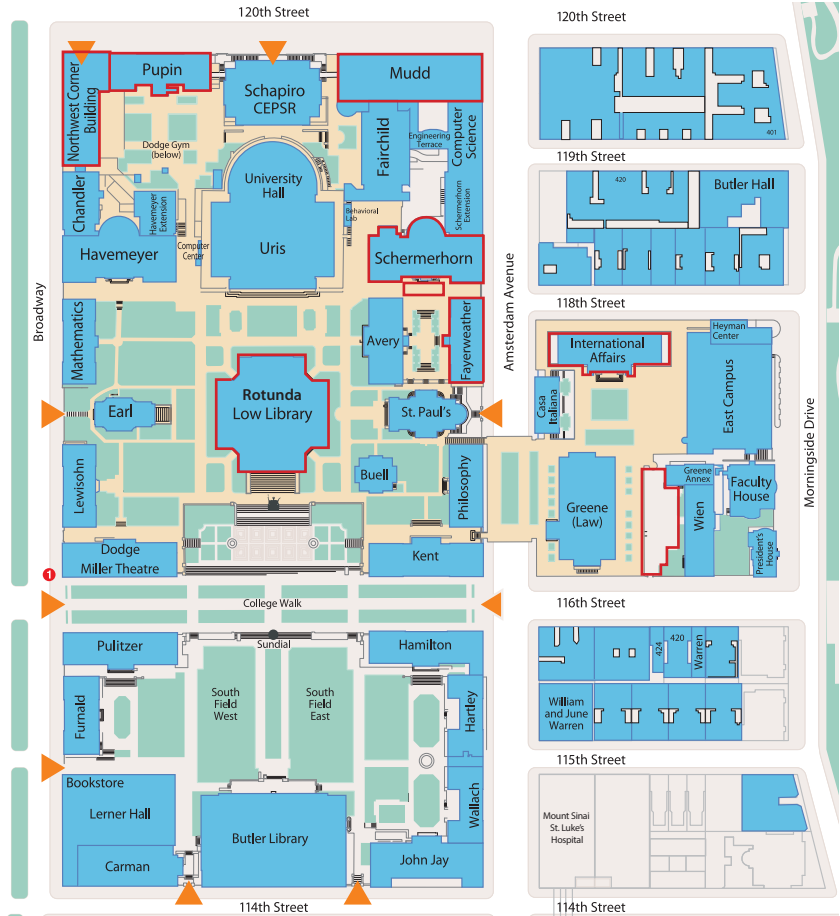
Fayerweather 310

**Refreshment Break Rooms:**

Schermerhorn Plaza Courtyard  
(upper campus building location)

Wien Plaza Courtyard  
(International Affairs Building location)

Legend	
	Columbia Buildings
	Sidewalks and Lower Level Paths
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**(X) = Coffee/Grab-n-Go**

**Avery Hall—Brownies Café**

**Butler Library—Blue Java Coffee Bar**

**Greene Hall—Lenfest Café**

**John Jay Hall—Dining Hall**

**Lerner Hall—Blue Java Café & Café East & ATM**

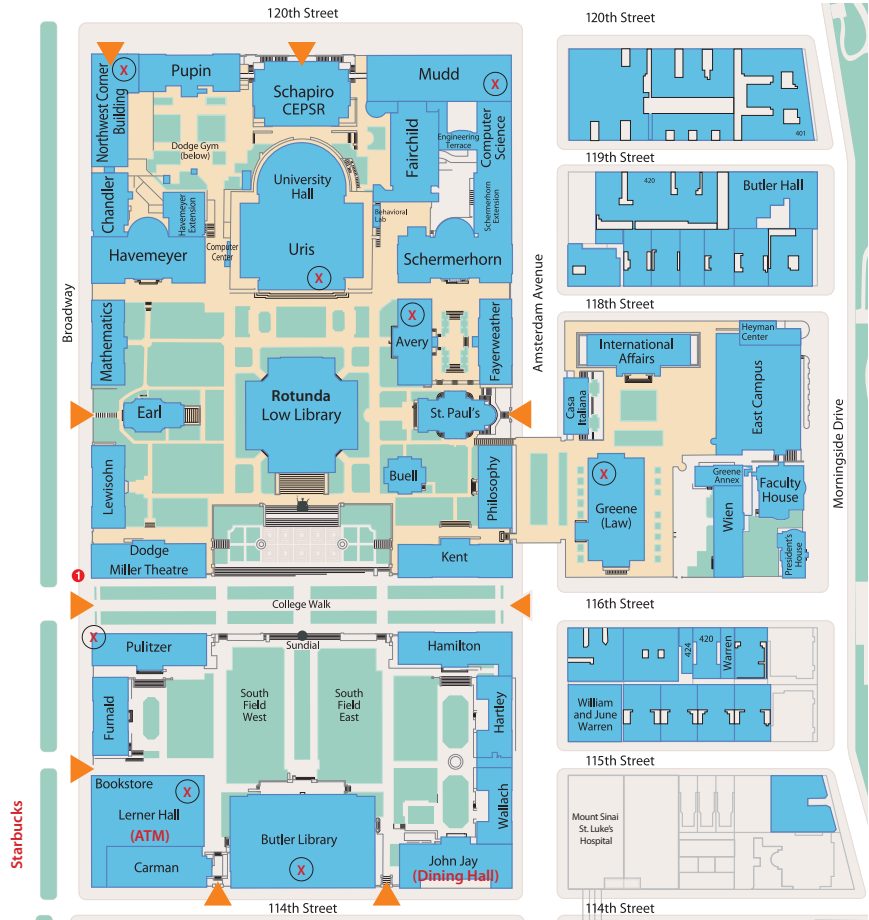
**Mudd Hall—Nous Espresso Bar & Blue Java Café**

**Northwest Corner Building—Joe Coffee**

**Pulitzer Hall—UP Café**

**Uris Hall—Uris Deli**

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