



IMPS 2021 • Virtual • July 19-23 ● ● ●
Conference Program

Updated: July 2, 2021

TUESDAY · JULY 20

8:45 a.m.-9:00 a.m.
US Eastern Time

STAGE 1

Welcome and Opening Remarks
Chair: Daniel Bolt

9:00 a.m.-9:55 a.m.
US Eastern Time

STAGE 1

Keynote Speaker: Jennifer Hill
Deep Down, Everyone Wants to be Causal
Chair: Francis Tuerlinckx

10:00 a.m.-10:35 a.m. US Eastern Time	STAGE 1 1.1: Configural Complexity in Latent Variable Modeling (Symposium) Chair: Wes Bonifay	STAGE 2 1.2: Scoring and Equating Chair: Jorge González	STAGE 3 1.3: Cognitive Diagnosis Models: the Q Matrix Chair: Peter Halpin	STAGE 4 1.4: Differential Item Functioning I Chair: Jing Lu
	Wes Bonifay CONFIGURAL COMPLEXITY AND THE PRINCIPLE OF MINIMUM DESCRIPTION LENGTH	Dongmei Li EVALUATING POPULATION INVARIANCE OF TEST EQUATING UNDER COVID-19	Motonori Oka NEW ITERATIVE ALGORITHM FOR THE DINA Q-MATRIX ESTIMATION	William Belzak REGULARIZED DIF: A PENALIZED EM ALGORITHM WITH CONCAVE AND NONCONCAVE PENALTY FUNCTIONS
	Li Cai THE COMPLEXITY OF MODELS FOR LONGITUDINAL ITEM RESPONSE DATA	Rudy Ligtoet TOTALLY POSITIVE SUMS AND FACTOR SCORES	Charles Hunter METHODS TO DEVELOP AND VALIDATE Q-MATRICES FOR COGNITIVE DIAGNOSTIC MODELING	Can Güner RATER BIAS AND ADDITIONAL DIF-APPLICATIONS IN AND BEYOND PSYCHOMETRICS
	Carl Falk OCKHAMSEM: A TOOL FOR FIT PROPENSITY IN COVARIANCE STRUCTURE MODELS	Marie Wiberg RELATIONSHIP BETWEEN STUDENTS' TEST RESULTS AND THEIR PERFORMANCE IN HIGHER EDUCATION USING DIFFERENT TEST SCORES	Yinghan Chen INFERENCE OF THE NUMBER OF ATTRIBUTES IN COGNITIVE DIAGNOSIS MODELS	Adéla Hladká ESTIMATION IN GENERALIZED LOGISTIC REGRESSION MODELS FOR DIF DETECTION
	Yon Soo Suh LOWER-ORDER MARGINS FOR INVESTIGATING THE COMPLEXITY OF ITEM RESPONSE MODELS	Nivedita Bhaktha SOME SUGGESTIONS FOR SCORING SOCIO-EMOTIONAL SKILL SCALES	Yuan Ge Q-MATRIX VALIDATION USING A REVISED STEPWISE WALD TEST APPROACH	Youngjin Han DIFFERENTIAL ITEM FUNCTIONING IN RESTRICTED RECALIBRATION OF ITEM RESPONSE MODELS
10:40 a.m.-11:15 a.m. US Eastern Time	STAGE 1 2.1: Bayesian Inference Chair: Zachary Roman	STAGE 2 2.2: Outlier Detection and Analysis Chair: Selena Wang	STAGE 3 2.3: Item Response Theory Chair: Jorge Bazán	STAGE 4 2.4: Structural Equation Modeling Chair: Kenneth Wilcox
	František Bartoš EXTENDING ROBMA WITH PET-PEESE: MITIGATING PUBLICATION BIAS WITH BAYESIAN MODEL AVERAGING	Yevgeniy Ptukhin DERIVATION OF THE PERCENTILE BASED PARAMETERS FOR TUKEY HH, HR AND HQ DISTRIBUTIONS	Zhihui Fu A CONDITIONAL AUGMENTED DATA EM ALGORITHM FOR FITTING LOGISTIC ITEM RESPONSE MODELS	Yang Liu GENERALIZED FIDUCIAL INFERENCE FOR COVARIANCE STRUCTURE ANALYSIS
	Sydne McCluskey LEARNING THE ROPEs: ASSESSING MEASUREMENT AGREEMENT WITH BAYESIAN EQUIVALENCE TESTING	Yishan Ding ADJUSTING GROUP-FIT STATISTICS FOR ESTIMATION UNCERTAINTY VIA MULTIPLE IMPUTATION	Yifan Li A FLEXIBLE POWER LINK OF ITEM RESPONSE THEORY MODEL FOR UNBALANCED DATA	Soyoung Kim BAYESIAN PLAUSIBLE VALUES VERSUS MLE IN TESTING MULTILEVEL MODERATED MEDIATION
	Julius Pfadt THE RELIABILITY OF MULTIDIMENSIONAL SCALES: A COMPARISON OF CONFIDENCE INTERVALS AND A BAYESIAN ALTERNATIVE	Peter Halpin DIF VIA ROBUST SCALING – A FRESH LOOK AT LORD'S TEST	Maxim Skryabin RECURSIVE BAYESIAN ESTIMATION FOR DYNAMIC IRT MODELS WITH FEEDBACK	Lijin Zhang BAYESIAN REGULARIZATION IN MULTIPLE INDICATORS MULTIPLE CAUSES MODELS
	David Kaplan DYNAMICALLY BORROWING HISTORICAL INFORMATION FOR THE ANALYSIS OF LARGE-SCALE ASSESSMENTS	Xin Tong THE IMPACT OF LIKELIHOODS AND OUTLIERS ON BAYESIAN MODEL SELECTION	Amanda Luby MODELING COVARYING RESPONSES IN COMPLEX DECISION-MAKING TASKS	Sonja Winter DETECTING MISSPECIFICATION IN LATENT GROWTH MODELS WITH BAYESIAN FIT INDICES
		Diego Carrasco CONTINUATION RATIO MODEL FOR POLYTOMOUS ITEMS UNDER SURVEY COMPLEX DESIGN	Graham Rifenbark ON THE MERITS OF AVAILABLE STRUCTURAL FIT INDICES AND THE IMPACT OF CONSTRUCT RELIABILITY	

TUESDAY · JULY 20

11:20 a.m.-11:55 a.m. US Eastern Time	STAGE 1	STAGE 2	STAGE 3	STAGE 4				
	3.1: Machine Learning <i>Chair: Dmitry Abbakumov</i>		3.2: Factor Analysis/Dimensionality Reduction <i>Chair: Terrence Jorgensen</i>		3.3: IRT with Noncognitive Measures <i>Chair: Mirka Henninger</i>		3.4: Cognitive Diagnostic Models <i>Chair: Mathew Madison</i>	
	Chengcheng Li LEARNING LARGE Q-MATRIX BY RESTRICTED BOLTZMANN MACHINES		Mohammed Abulela HOW DOES SUBSAMPLE VARIABILITY IMPACT EXPLORATORY ITEM FACTOR ANALYSIS RESULTS?		Brooke Magnus SYMPTOM PRESENCE AND SYMPTOM SEVERITY AS UNIQUE INDICATORS OF PSYCHOPATHOLOGY		Jimmy de la Torre MC-DINA MODEL EXTENSION TO OPTIMIZE THE DIAGNOSTIC VALUE OF MULTIPLE-CHOICE DATA	
	Qidi Liu APPLICATIONS OF MACHINE LEARNING IN EDUCATIONAL AND PSYCHOLOGICAL MEASUREMENT		Edward Ip BAYESIAN COVARIANCE ADAPTIVE LASSO FACTOR ANALYSIS MODELS WITH ORDINAL DATA		Fajer Shamsaldeen SYSTEMATIC REVIEW OF THE USES OF UNFOLDING MODELS IN PSYCHOLOGY		James Balamuta HIGHER-ORDER EXPLORATORY GENERAL DIAGNOSTIC MODEL FOR BINARY MULTIVARIATE DATA	
	Minju Hong TWO-STEP APPROACH TO TOPIC MODELING TO INCORPORATE COVARIATES AND OUTCOMES		Junhao Pan COMPARISON BETWEEN DIFFERENT PARAMETERS IDENTIFICATION CRITERIA USING THE BAYESIAN LASSO		Nana Kim ON THE USE OF RESPONSE TIMES TO IMPROVE ESTIMATION OF RESPONSE STYLES		Eduardo Oliveira A BOUNDED COGNITIVE DIAGNOSIS MODEL TO CLASSIFICATION PROBLEM	
Youngjun Lee COMPLEX COVARIATE EFFECTS OF MODEL-BASED RECURSIVE PARTITIONING ON UNCOVERING POPULATION HETEROGENEITY		Katharina Groskurth BEYOND TRADITIONAL CUTOFFS: JUDGING MODEL FIT THROUGH ROC ANALYSIS		Andrés Christiansen EXTREME RESPONSE STYLES IN ATTITUDINAL SCALES OF TIMSS 2019		Auburn Jimenez JAN EXPLORATORY DIAGNOSTIC MODEL USING A SEQUENTIAL LOGIT LINK		
Sunmee Kim MULTILEVEL EXTENDED REDUNDANCY ANALYSIS: BIOLOGICAL, PSYCHOLOGICAL, AND ENVIRONMENTAL PREDICTORS OF COGNITIVE CHANGES IN LATE ADULTHOOD		Ji Yeh Choi APPLICATIONS OF COMPONENT-BASED MODELS: SPARSITY IN REGRESSION WITH DIMENSION REDUCTION AND BAYESIAN APPROACH TO EXTENDED REDUNDANCY ANALYSIS		Yu Wang NONPARAMETRIC CLASSIFICATION METHOD FOR MULTIPLE-CHOICE ITEMS IN COGNITIVELY DIAGNOSTIC ASSESSMENTS		Kentaro Fukushima MODELING PARTIAL KNOWLEDGE IN MULTIPLE-CHOICE COGNITIVE DIAGNOSTIC MODELS		

12:00 p.m.-12:55 p.m. US Eastern Time	STAGE 1	STAGE 2
Invited Talk: Elena Erosheva <i>Statistical Approaches to Understanding Characteristics and Limits of Peer Review Assessments</i> <i>Chair: Sophia Rabe-Hesketh</i>		Invited Talk: Leslie Rutkowski <i>Beyond Carrying Capacity: Have International Assessments Been Stretched Too Far?</i> <i>Chair: David Kaplan</i>

WEDNESDAY · JULY 21

9:00 a.m.-9:55 a.m. US Eastern Time	STAGE 1	STAGE 2
Invited Talk: Daniel Heck <i>Cognitive Psychometrics using Hierarchical Multinomial Processing Tree Models</i> <i>Chair: Jimmy de la Torre</i>		Invited Talk: Klaas Sijtsma <i>A Century of Reliability: Issues and Concerns</i> <i>Chair: Steven Culpepper</i>

10:00 a.m.-10:35 a.m. US Eastern Time	STAGE 1	STAGE 2	STAGE 3	STAGE 4				
	4.1: Response Times and Cognitive Diagnosis <i>Chair: Manqian Liao</i>		4.2: Measurement Invariance <i>Chair: Brooke Magnus</i>		4.3: Multilevel Analysis <i>Chair: Nidhi Kohli</i>		4.4: Mediation Analysis <i>Chair: Patrick Manapat</i>	
	Chengbin Yin JOINT MODELING OF RESPONSES, RESPONSE TIME, AND ANSWER CHANGES IN TESTLET-BASED ASSESSMENT FOR COGNITIVE DIAGNOSIS		Yichi Zhang CLASSIFICATION ACCURACY OF MULTIDIMENSIONAL TESTS: QUANTIFYING THE IMPACT OF NONINVARIANCE		Kenneth Wilcox MODELING APPROACHES FOR CROSS-SECTIONAL INTEGRATIVE DATA ANALYSIS: EVALUATIONS AND RECOMMENDATIONS		Rongqian Sun SAMPLE SIZE DETERMINATION GUIDELINES FOR LATENT MEDIATION MODELS: A MONTE CARLO STUDY	
Xin Qiao EXPLANATORY COGNITIVE DIAGNOSTIC MODELING INCORPORATING RESPONSE TIMES		Elizabeth Grandfield LONGITUDINAL MEASUREMENT INVARIANCE: EVALUATION CONSIDERATIONS		Gertrudes Velasquez EFFECTS IN CROSS-LAGGED PANEL MEDIATION MODELS UNDER SUB-OPTIMAL DATA CONDITIONS				

WEDNESDAY · JULY 21

	STAGE 1	STAGE 2	STAGE 3	STAGE 4
10:00 a.m.-10:35 a.m. US Eastern Time <i>Continued</i>	4.1: Response Times and Cognitive Diagnosis <i>Continued</i>	4.2: Measurement Invariance <i>Continued</i>	4.3: Multilevel Analysis <i>Continued</i>	4.4: Mediation Analysis <i>Continued</i>
	Tong Wu MODELING STUDENT'S RESPONSE TIME IN AN ATTRIBUTE BALANCED COGNITIVE DIAGNOSTIC ADAPTIVE TESTING	Rudolf Debelak VARIATIONS OF SCORE-BASED MEASUREMENT INVARIANCE TESTS FOR MULTIPLE-GROUP IRT MODELS	Shufang Zheng THE INFLUENCE OF INACCURATE INFORMATIVE PRIORS ON BAYESIAN MULTILEVEL MODELING	Xiao Liu BAYESIAN HYPOTHESIS TESTING OF MEDIATION
	Shiyu Wang USING RESPONSE TIMES AND RESPONSE ACCURACY TO RETHINK "MASTERY" IN COGNITIVE DIAGNOSIS MODELS	Gabriel Wallin A MODEL-BASED APPROACH FOR SIMULTANEOUS CLUSTERING OF INDIVIDUALS AND ITEMS	Linying Ji EVALUATING MISSING DATA HANDLING METHODS FOR MULTILEVEL MULTIVARIATE LONGITUDINAL MODEL	Davood Tofghi QUANTIFYING BIAS IN LONGITUDINAL MEDIATION ANALYSIS
	Yuan Ge A MULTIPLE GROUP JOINT MODELING OF ITEM RESPONSE AND RESPONSE TIMES WITH HIGH-ORDER COGNITIVE DIAGNOSTIC MODELING TO UNDERSTAND THE EFFECT OF SOCIOECONOMIC STATUS DISPARITIES IN STUDENTS' ACADEMIC ACHIEVEMENT	Cigdem Toptas EVALUATING INVARIANT MEASUREMENT IN CROSS-CULTURAL RESEARCH: THE CASE OF MATHEMATICS SELF-EFFICACY		

	STAGE 1	STAGE 2	STAGE 3	STAGE 4
10:40 a.m.-11:15 a.m. US Eastern Time	5.1: Topics on Cross-Cultural Measurement (Symposium) <i>Chair: R. Trent Haines</i>	5.2: Big Data/Process Data <i>Chair: Yang Liu</i>	5.3: Mixture Models <i>Chair: Thorsten Meiser</i>	5.4: Missing Data <i>Chair: Gabriel Wallin</i>
	Christopher Amissah A RASCH ANALYSIS OF A TWI TRANSLATION AND ADAPTATION OF THE REVISED UCLA LONELINESS SCALE	Qiwei He EXAMINING RESPONDENTS' ITEM TRANSITION AND NAVIGATION PATTERNS WITH SEQUENCE CLUSTERING	Rehab Al Hakmani IDENTIFYING THE LATENT STRUCTURE OF TIMSS-2019 USING MIXTURE IRT MODELS	Manshu Yang HANDLING MISSING DATA IN PARTIALLY NESTED RANDOMIZED CONTROL TRIALS
	Janine Jackson CONFIDENCE, CONTROL, AND COLLABORATION: A CROSS-CULTURAL INVESTIGATION OF JOB SATISFACTION AMONG TEACHERS IN SELECT EUROPEAN UNION COUNTRIES	Hua-Hua Chang THE FUTURE OF PSYCHOMETRIC RESEARCH: FROM STANDARDIZED TESTING TO LEARNING ANALYTICS	Jung-Jung Lee A PIECEWISE LATENT VARIABLE REGRESSION MIXTURE MODEL	Ya-Hui Su THE EFFECTS OF RESORTING MISSING DATA FOR UNIFORM DIF ANALYSIS
	Taj Rollins PREVALENCE OF COMMONLY REPORTED RESPONSE STYLES IN A REPRESENTATIVE SAMPLE OF AMERICAN ADOLESCENTS AND YOUNG ADULTS	Antonio Laverghetta Jr. PREDICTING HUMAN PSYCHOMETRIC PROPERTIES USING COMPUTATIONAL LANGUAGE MODELS	Hulya Duygu Yigit VARIABLE SELECTION FOR EXPLORATORY RESTRICTED LATENT CLASS MODELS WITH COVARIATES	Jinxin Guo PARAMETER ESTIMATION OF IRT MODELS WITH OMISSIONS
	R. Trent Haines CROSS-CULTURAL TRANSLATION AND ADAPTATION: EXAMINING ADHERENCE TO INTERNATIONAL TEST COMMISSION GUIDELINES	Daniel Katz TECHNOLOGY-ENHANCED LEARNING PLATFORMS, STUDENT OPPORTUNITIES TO LEARN, AND TEST FAIRNESS	Jingyu Sun A NOVEL FINITE MIXTURE MODEL TO CLUSTER DYNAMIC LATENT ABILITY IN ITEM RESPONSE THEORY MODELS	Jing Lu A SEQUENTIAL PROCESS COGNITIVE DIAGNOSTIC MODEL FOR NOT-REACHED AND OMITTED ITEMS
		Hyeeyun Seok GUIDELINE TO EFFECTIVE USE IN MACHINE LEARNING APPROACHES TO PSYCHOLOGY	Jing Ouyang IDENTIFIABILITY OF LATENT CLASS MODELS WITH COVARIATES	Egamaria Alacam A MODEL-BASED IMPUTATION APPROACH FOR SCALE SCORES
			Adam Sales A CONDITIONAL APPROACH TO STRUCTURAL ZEROES IN LATENT CLASS ANALYSIS	

WEDNESDAY · JULY 21

	STAGE 1	STAGE 2	STAGE 3	STAGE 4
11:20 a.m.-11:55 a.m. US Eastern Time	6.1: Networks <i>Chair: Brooke Houck</i>	6.2: Rasch Modeling <i>Chair: Qiwei He</i>	6.3: DIF and Anchor Selection Issues <i>Chair: Allison Boykin</i>	6.4: Longitudinal Data Analysis <i>Chair: Diego Carrasco</i>
	Selena Wang EXPLORE THE STRUCTURE IN BIG DATA USING A JOINT MODELING FRAMEWORK FOR SOCIAL NETWORKS AND HIGH-DIMENSIONAL ATTRIBUTES	Charalambos Kollias CONSTRUCTING A RASCH SCALE	Ben Stenhaus TREADING CAREFULLY: AGNOSTIC IDENTIFICATION AS THE TENUOUS FIRST STEP OF DETECTING DIFFERENTIAL ITEM FUNCTIONING	Kazuhiro Yamaguchi A VARIATIONAL BAYES INFERENCE ALGORITHM FOR LONGITUDINAL DIAGNOSTIC CLASSIFICATION MODELS
	Zachary Roman AN ARGUMENT FOR EXPLICITLY MODELING SOCIAL DEPENDENCE IN THE BEHAVIORAL SCIENCES: ANALYSIS OF STUDENT POPULARITY AS A FUNCTION OF SOCIAL NETWORKS USING A SOCIAL NETWORK AUTO-REGRESSIVE (SNAR) MODEL	Andreas Kurz CONDITIONAL INFERENCE IN SMALL SAMPLE SCENARIOS	Qiao Lin A CONDITIONAL LOGISTIC REGRESSION APPROACH TO STUDYING DIFFERENTIAL ITEM FUNCTIONING	Rohit Batra MODELING RETEST EFFECTS IN DEVELOPMENTAL PROCESSES USING LATENT CHANGE SCORE MODELS
	Haiyan Liu SOCIAL NETWORK ANALYSIS OF THE SENDING EFFECT OF PERSONALITY ON DIRECTIONAL FRIENDSHIP	Yvonnick Noel STATISTICAL IMPLICATION ANALYSIS AND THE RASCH MODEL	Daniel Schulze USING BAYESIAN MODEL AVERAGING FOR CONDITIONS OF MEASUREMENT NONINVARIANCE	Pablo Fernández-Cánc STOCHASTIC LATENT CHANGE SCORE MODEL: MONTE-CARLO STUDY AND THEORETICAL CONSIDERATIONS
	Hsiu-Ting Yu CORRESPONDENCES BETWEEN LATENT VARIABLE MODELS AND PSYCHOMETRIC NETWORK MODELS	Naiara Caroline Aparecido das Santos A NEW RASCH COUNT MODEL	Mirka Henninger MANTEL-HAENZEL EFFECT SIZE AS A STOPPING CRITERION IN RASCH TREES	Mar J.F. Ollero KALMAN SCORES FOR RECOVERING INDIVIDUAL TRAJECTORIES IN ACCELERATED LONGITUDINAL DESIGNS
	Dmitry Abbakumov THE PSYCHOLOGICAL NETWORK WITH GROWTH EFFECTS FOR MODELING AND EXPLAINING ONLINE LEARNERS' DIFFICULTIES	Felix Zimmer POWER ANALYSIS FOR TESTING LINEAR HYPOTHESES USING MARGINAL MAXIMUM LIKELIHOOD	Kevin Carl Santos DIF-CD-CAT: IMPROVING ATTRIBUTE CLASSIFICATION IN THE PRESENCE OF DIFFERENTIAL ITEM FUNCTIONING	Corissa Rohloff FUNCTIONAL FORM COMPLEXITY AND MODEL FIT FOR LONGITUDINAL DATA
	Terrence Jorgensen BUILDING DYADIC NETWORK MODELS FOR DYAD-CONSTANT DEPENDENT VARIABLES			Simran Johal DETECTING COHORT EFFECTS IN LATENT CHANGE SCORE AND MULTILEVEL MODELS

	STAGE 1	STAGE 2	STAGE 3
12:00 p.m.-12:25 p.m. US Eastern Time	Spotlight Talk: Oludare Ariyo <i>Prior Distributions for Structured Covariance Matrices</i> <i>Chair: Edward Ip</i>	Spotlight Talk: Heather Gunn <i>Fitting a LASSO to Multiply Imputed Data: A Missing Discussion</i> <i>Chair: Chun Wang</i>	Spotlight Talk: Hong Jiao <i>Analyzing Responses, Response Time, and Answer Changes for Cognitive Diagnosis with Machine Learning Algorithms</i> <i>Chair: Silvia Cagnone</i>

	STAGE 1
12:30 p.m.-1:15 p.m. US Eastern Time	2021 Early Career Award Keynote Speaker: Minjeong Jeon <i>A Network View on Item Response Data: A Latent Space Modeling Approach to Item Response Network</i> <i>Chair: Matthias von Davier</i>

THURSDAY · JULY 22

9:00 a.m.-9:55 a.m. US Eastern Time	STAGE 1 Invited Talk: Maarten Marsman <i>What Network Psychometrics Can Learn from Classic Psychometric and Network Modelling</i> Chair: Matthew Johnson
--	---

STAGE 2			
9:00 a.m.-9:25 a.m. (Liao) 9:30 a.m.-9:55 a.m. (Belov) US Eastern Time	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center; padding: 5px;"> 9:00 a.m.-9:25 a.m. Spotlight Talk: Manqian Liao <i>Quality Assurance in Digital-First Assessment</i> Chair: Qiwei He </td> <td style="width: 50%; text-align: center; padding: 5px;"> 9:30 a.m.-9:55 a.m. Spotlight Talk: Dmitry Belov <i>Predicting Item Characteristic Curve (ICC) Using a Softmax Classifier</i> Chair: Hua-Hua Chang </td> </tr> </table>	9:00 a.m.-9:25 a.m. Spotlight Talk: Manqian Liao <i>Quality Assurance in Digital-First Assessment</i> Chair: Qiwei He	9:30 a.m.-9:55 a.m. Spotlight Talk: Dmitry Belov <i>Predicting Item Characteristic Curve (ICC) Using a Softmax Classifier</i> Chair: Hua-Hua Chang
9:00 a.m.-9:25 a.m. Spotlight Talk: Manqian Liao <i>Quality Assurance in Digital-First Assessment</i> Chair: Qiwei He	9:30 a.m.-9:55 a.m. Spotlight Talk: Dmitry Belov <i>Predicting Item Characteristic Curve (ICC) Using a Softmax Classifier</i> Chair: Hua-Hua Chang		

10:00 a.m.-10:35 a.m. US Eastern Time	STAGE 1	STAGE 2	STAGE 3	STAGE 4
	7.1: <i>Identification Problems in Empirical Research (Symposium)</i> Chair: Eduardo Alarcón-Bustamante	7.2: <i>Response Times</i> Chair: Dongmei Li	7.3: <i>Longitudinal Data Analysis</i> Chair: Leslie Rutkowski	7.4: <i>Time Series Analysis</i> Chair: Hsiu-Ting Yu
	Eduardo Alarcón-Bustamante MARGINAL EFFECT IN SELECTION TESTS: A PARTIAL IDENTIFICATION APPROACH	Inhan Kang MODELING THE PSYCHOLOGICAL PROCESSES UNDERLYING ORDINAL RESPONSES AND RESPONSE TIMES	Kong ju Suh A LONGITUDINAL EXTENSION OF POLYTOMOUS ITEM RESPONSE THEORY FOR GROWTH MODELING	Zhenqiu Lu MULTILEVEL TIME SERIES MODEL
	Ernesto San Martín GENDER BIAS IN HIGHER EDUCATION: HOW FEASIBLE IS IT TO DETECT IT IN THE PRESENCE OF NON-RESPONSES?	Tobias Deribo CAN RAPID GUESSING BIAS THE IDENTIFIED SPEED-ABILITY-RELATION?	Hanna Kim A LATENT VARIABLE FRAMEWORK FOR DYADIC DATA WITH MULTIPLE INDICATORS	Paul Scott BAYES AND ML FOR DETECTING CAUSAL DOMINANCE WITH SMALL SAMPLES
	Xavier de Luna INFERENCE TAKING INTO ACCOUNT UNCERTAINTY DUE TO (UN)TESTABLE MODEL ASSUMPTIONS	Xiaojing Wang BAYESIAN JOINT ITEM RESPONSE THEORY MODELS FOR MULTIDIMENSIONAL RESPONSE DATA	Ajay Tripathi UNDYN: UNHINGED DYNAMIC ABILITY ESTIMATION	Ai Ye A COMPARISON OF PSYCHOMETRIC APPROACHES FOR MULTIPLE SUBJECT DYNAMIC MODELS
Jorge González ASYMMETRY OF ICCS IN IRT MODELS: CAN WE ACCOUNT FOR IT USING THE LPE MODEL?	Weicong Lyu HOW CONTENT TRAITS AND RESPONSE STYLES SIMULTANEOUSLY AFFECT RESPONSE TIMES	Jinwen Luo CHINESE UNIVERSITY STUDENTS' GROWTH IN CRITICAL THINKING: ACCOUNTING FOR SCHOOL TRANSITION AND SELECTION EFFECTS	Yuhao Li NONPARAMETRIC MODELING FOR DYNAMIC CHANGES OF ABILITY IN ITEM RESPONSE THEORY MODELS	

THURSDAY · JULY 22

	STAGE 1	STAGE 2	STAGE 3	STAGE 4
10:40 a.m.-11:15 a.m. US Eastern Time	8.1: Foundational Issues <i>Chair: Maxim Skryabin</i>	8.2: Issues in IRT <i>Chair: Stella Kim</i>	8.3: Issues in Cognitive Diagnostic Modeling <i>Chair: Ya-Hui Su</i>	8.4: Test Security and Aberrant Responding <i>Chair: Anne Thissen-Roe</i>
	Hojjatollah Farahani INTRODUCING THE SEGMENTED CONSTRUCT VALIDITY OF A PSYCHOLOGICAL TOOL USING FUZZY MATRIX THEORY	Klint Kanopka ADDRESSING THE BLUE BOOK PROBLEM: APPLICATIONS OF A POSITION- SENSITIVE IRT MIXTURE MODEL TO ENEM 2014	Yuqi Gu IDENTIFIABILITY OF HIERARCHICAL COGNITIVE DIAGNOSTIC MODELS	Yang Du PREKNOWLEDGE DETECTION: A BAYESIAN PREDICTIVE CHECKING METHOD
	Allison Boykin SIMULATION STUDIES IN PSYCHOMETRICS: STATE OF THE PRACTICE	Hyung Jin Kim ADJUSTING PARAMETER ESTIMATES FOR NOT-REACHED ITEMS	Youn Seon Lim THE MANTEL-HAENSZEL STATISTIC FOR DETECTING TESTLET EFFECTS IN COGNITIVELY DIAGNOSTIC TESTS	Qingzhou Shi AN SEM-BASED JOINT-MODELING APPROACH ON RESPONSES AND RESPONSE TIME IN MULTIDIMENSIONAL TEST TO ASSESS CHEATING BEHAVIORS
	Patrick Manapat A REVISED AND EXPANDED TAXONOMY FOR UNDERSTANDING HETEROGENEITY IN RESEARCH AND REPORTING PRACTICES	Rabia Karatoprak Ersen IMPACT OF PRETEST ITEM QUALITY ON PARAMETER RECOVERY IN MST	Pablo Nájera DERIVING POSTERIOR PROBABILITIES FROM THE NONPARAMETRIC CLASSIFICATION METHOD	Richard Feinberg EXPLORING THE UTILITY OF NONFUNCTIONING DISTRACTORS
	Jinghao Ma PROPOSAL FOR CALCULATING ENCOUNTER RATE IN QUALITATIVE RESEARCH	Yu-Wei Chang AN ITEM RESPONSE THEORY TREE MODEL INCORPORATING GUESSING BEHAVIOR FOR THE PRESENCE OF NON-RESPONSE DATA	Chenchen Ma BRIDGING PARAMETRIC AND NONPARAMETRIC METHODS IN COGNITIVE DIAGNOSIS	Susanne Frick A MIXTURE MODEL FOR FAKING IN MULTIDIMENSIONAL FORCED-CHOICE QUESTIONNAIRES
	Po-Hsien Huang PSYCHOMETRIC MODELING VIA DEEP LEARNING LIBRARIES	Marco Siyuan Chen NOMINAL ITEM CALIBRATION WITH A REGULARIZED MULTIPLE-CHOICE MODEL	Sook Hyun Park BRIDGING THE GAP IN CDM RESEARCH: META-ANALYSIS OF SIMULATED AND REAL DATA	
		Xiuxiu Tang COMPARISON OF ON-THE-FLY MST WITH PREASSEMBLED MST ON PISA DATA	Madeline Schellman ESTIMATING THE RELIABILITY OF SKILL TRANSITION IN LONGITUDINAL DCMS	

	STAGE 1	STAGE 2	STAGE 3	
11:20 a.m.-11:55 a.m. US Eastern Time	9.1: Writing Assessment <i>Chair: Richard Feinberg</i>	9.2: Reliability <i>Chair: Marie Wiberg</i>	9.3: Causal Inference <i>Chair: Davood Tofighi</i>	
	Ye Yuan USING UNFOLDING MODELS TO IDENTIFY FEEDBACK STRATEGIES FOR STUDENT WRITING	Patřicia Martinkov INTER-RATER RELIABILITY IN COMPLEX SITUATIONS: MODEL SELECTION	Youmi Suk REGRESSION DISCONTINUITY DESIGNS WITH AN ORDINAL RUNNING VARIABLE: EVALUATING THE EFFECTS OF EXTENDED TIME ACCOMMODATIONS FOR ENGLISH LANGUAGE LEARNERS	
	Jordan Wheeler IMPACT OF PRIORS ON PARAMETER RECOVERY FOR LATENT DIRICHLET ALLOCATION	Hok Chio Lai OBTAINING RELIABILITY FOR DAILY DIARY DATA USING MULTILEVEL FACTOR ANALYSIS	Keith Markus CAUSATION, COUNTERFACTUALS AND PSYCHOMETRICS: RUBIN, LEWIS AND PEARL REVISITED	
	Constanza Mardones-Segovia COMPARISON OF ESTIMATION ALGORITHMS FOR LATENT DIRICHLET ALLOCATION	Zhenqiu Lu RELIABILITIES UNDER MULTI-LEVEL STRUCTURE WITH MISSING VALUES	Qi Wang LATENT-VARIABLE CAUSAL MEDIATION ANALYSIS WITH POST-TREATMENT CONFOUNDING VARIABLES	
	Magdalen Beiting-Parrish USING TEXT CLUSTERING TO EXAMINE THE LANGUAGE OF MATHEMATICS ITEMS	Anne Thissen-Roe SOME ADVENTURES IN RELIABILITY ESTIMATION	Winnie Wing-Yee Tse INCORPORATING UNCERTAINTY IN DESIGN PARAMETERS: A HYBRID CLASSICAL-BAYESIAN POWER ANALYSIS APPROACH FOR TWO-LEVEL CLUSTER RANDOMIZED TRIALS	
	Ru Lu SUBGROUP ESSAY COMPOSITION PROCESS DIFFERENCES IN SCENARIO- BASED ASSESSMENT	Qi (Helen) Huang COMPARISON OF DCM AND IRT RELIABILITIES USING NEW INDICES		

12:00 p.m.-12:55 p.m. US Eastern Time	STAGE 1 2021 Career Award Keynote Speaker: Paul DeBoeck <i>All Models are Wrong, but Some Model Violations are Useful</i> <i>Chair: Mark Wilson</i>
--	--

FRIDAY · JULY 23

9:00 a.m.-9:45 a.m.
US Eastern Time

STAGE 1

Dissertation Award Speaker: Jonas Haslbeck
Modeling Psychopathology: From Data Models to Formal Theories
Chair: Terry Ackerman

9:50 a.m.-10:35 a.m.
US Eastern Time

STAGE 1

2020 Early Career Award Keynote Speaker: Steffi Pohl
Reframing Rankings in Educational Assessments: Disentangling Different Aspects of Test Performance Using Process Data
Chair: Jeffrey Douglas

STAGE 1	STAGE 2	STAGE 3
10.1: Dynamic Modeling with Categorical Data (Symposium) Chair: Meng Chen	10.2: Regression Analysis Chair: Rudolf Debelak	10.3: Higher Order/Hierarchical Factor Structures Chair: Wes Bonifay
Xiao Yang DESCRIBING AND CONTROLLING MULTIVARIATE NONLINEAR DYNAMICS: A BOOLEAN NETWORK APPROACH	Yannick Rothacher IDENTIFYING INFORMATIVE PREDICTOR VARIABLES WITH RANDOM FORESTS	Sayed H. Kadhem BI-FACTOR AND SECOND-ORDER COPULA MODELS FOR ITEM RESPONSE DATA
Meng Chen APPLYING THE PARTICLE FILTER TO MODEL DYNAMICS WITH ORDINAL DATA		Xin Xu MODELLING TESTLET EFFECT INCORPORATING CORRELATIONS UNDER DIAGNOSTIC CLASSIFICATION MODELS
Sebastian Castro-Alvarez DYNAMIC ITEM RESPONSE THEORY: AN APPROACH TO ANALYZE POLYTOMOUS TIME-SERIES DATA	Di Jody Zhou VARIABLE SELECTION COMPARISON OF LASSO AND STEPWISE REGRESSION	Anastasios Psychogyiopoulos WHY BIFACTOR MODELS OUTPERFORM HIGHER-ORDER FACTOR MODELS FOR GENERAL INTELLIGENCE: A NETWORK PERSPECTIVE
Sijing Shao DYNAMIC POISSON FACTOR ANALYSIS: A HIERARCHICAL BAYESIAN APPROACH WITH INTENSIVE TEXT DATA		Xiaobei Li REGULARIZED SEM WITH MISSING DATA: A COMPARISON OF DIFFERENT METHODS
Silvia Cagnone COMPARISON BETWEEN DIFFERENT ESTIMATION METHODS IN DYNAMIC LATENT VARIABLE MODELS FOR CATEGORICAL DATA		Denis Federiak ON THE CRITIQUE OF THE OBLIQUE BIFACTOR MODELS: CONDITIONS FOR IDENTIFICATION AND PROBLEMS IN INTERPRETATION

11:20 a.m.-12:00 p.m.
US Eastern Time

STAGE 1

Members Meeting and Awards Ceremony
Chair: Carolyn Anderson

12:05 p.m.-1:00 p.m.
US Eastern Time

STAGE 1

Presidential Address Speaker: Daniel Bolt
Item Complexity: A Neglected Psychometric Feature of Test Items?
Chair: Irimi Moustaki

1:00 p.m.-1:15 p.m.
US Eastern Time

STAGE 1

IMPS Virtual Group Photo
Be sure to join us at the end of the Virtual Meeting to take a virtual group photo.
Chair: Daniel Bolt