PARALLEL SESSIONS

Day 1 (Wednesday, 27th July)

Parallel Sessions 1 9.00 – 10.30	**Session 1:** **Methodological designs** *Chair: Mirjam Moerbeek* **Room Neptuno**	C27 The design of cluster randomized trials with random cross-classifications C264 Gender roles modulate lateralization of event-related brain responses to faces C342 Evaluating the promise of research methods
	Session 2: **Test development** *Chair: Juan R. Barrada* **Room Discóbolo**	C179 Dimensionality of the Perceived Stress Scale and implications for scoring C227 Calibration of a new item pool based on the Big Five: An application of the bi-factor model C298 Psychometric validation of the interpersonal communication competence self-assessment C317 A mixture Rasch Poisson counts model applied to a reading speed test
	Symposium 8: **Methodological advances in the psychometric analysis of responses and response times** *Chair: Dylan Molenaar* **Room Apolo**	• Modelling SATF and CAF slopes between and within experimental time-limit conditions of speeded tests • Dichotomizing response times -- from 'Schnapsidee' to 'recommended method' • Posterior predictive checks for conditional independence between response time and accuracy • What can we learn from conditional dependence between response time and response accuracy? • A dynamic IRT modeling approach to the analysis of responses and response times

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Parallel Sessions 2 **11.00 – 12.30**	**Symposium 1:** **Assigning test scores: Recent methodological advances in analyzing educational test data** *Chair: Carmen Köhler* **Room Apolo**	• Active in navigation = better in evaluation? What process data can tell us about competencies in evaluating online information • Detection of random item parameter variance with Multilevel Logistic Regression • Absolute and relative measures of instructional sensitivity • Practical significance of item misfit in educational achievement tests.
	Session 3: **Software demonstrations** *Chair: Yves Rosseel* **Room Discóbolo**	C41 Psychological test toolbox software demonstration: A new tool to compute factor analysis controlling response bias C55 *RESTRIKTOR:* Beyond classical null-hypothesis testing
	Session 4: **Data Analysis (I)** *Chair: Charles Driver* **Room Neptuno**	C34 Does assessing moderated mediation in linear models require fewer confounding assumptions than assessing mediation? C35 Using continuous time dynamic models to understand the time course of interventions C50 On the modeling of the ceiling effect in confirmatory factor analysis C62 Latent State-Trait models for longitudinal family data: Investigating consistency in perceived support

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Parallel Sessions 3 **15.30 – 17.00**	**Symposium 2:** **Entrepreneurial personality assessment: current perspectives and future trends** *Chair: José Muñiz* **Room Apolo**	• Assessment of enterprising personality: Where we are and where we are going • Assessing adult entrepreneurs: Adaption of the BEPE (*Batería para la Evaluación de la Personalidad Emprendedora*) questionnaire into adult population • Assessment of enterprising personality by implicit association test: A Multifactor Trait IAT • Suitability of Multidimensional Item Response Theory models for the assessment of entrepreneurial personality
	Session 5: **Survey Methodology** *Chair: Peter Lugtig* **Room Discóbolo**	C37 Nurse effects in survey biomarkers C53 Do interviewers' attitudes towards sharing personal information affect the consent rate they achieve? C181 Using paradata to explain attrition in the German internet panel C254 Satisficing or insufficient adjustment? Uncovering the process underlying online survey response C343 Differential Item Function in educational surveys. It's there and it should be there!
	Session 6: **Methodological applications (I)** *Chair: Wayne Velicer* **Room Neptuno**	C32 Estimation of the proportion of underachieving students in compulsory secondary education in Spain: An application of the Rasch model C39 Pre-entry characteristics and trajectory of university dropout in Thailand: A discrete time survival analysis C42 Investigating the mechanisms of smoking behavior change: Single mediation models for contemplators

Day 2 (Thursday, 28th July)

Parallel Sessions 4 9.00 – 10.30	**Session 7:** **Statistical foundations** *Chair: Rolf Steyer* **Room Apolo**	C136 A IRT latent state model with item specific variables C199 Extending tests of theory-based quantitative predictions (TTQP) to exercise and stress C301 20 years of Psychological Methods (PM)
	Session 8: **Data Analysis (II)** *Chair: Ines Devlieger* **Room Discóbolo**	C64 Bayes factors for stochastic orderings C83 Factor Score Regression: An alternative for SEM C134 A multilevel graded-response model for cross-classified multi-trait-multi-rater data C202 Measurement error and person-specific reliabilities in multilevel autoregressive modeling
	Session 9: **Educational Measurement** *Chair: Francisco J. Abad* **Room Neptuno**	C142 A simple and efficient metropolis sampler for educational measurement C255 Iteration of partially specified target matrices: Application to the bi-factor case C278 Psychometrics of an objective structured clinical examination: Reliability, confidence, and performance

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Parallel Sessions 5 11.00 – 12.30	**Symposium 11:** **Educational Assessment in the international context: Challenges of all parties involved** *Chair: Isabel Benítez* **Room Discóbolo**	• School efficiency measurement based on results from PISA for schools pilot study 2013-2014 in Spain • Precision of measurement in PISA for schools Spanish-pilot • Two statistical tools to study the differences in academic performance between countries: 15 years of empirical evidence from PISA project • PISA-based test for schools: What can we learn from the most efficient schools? • Implementation of value-added modeling in the assessment of secondary schools
	Session 10: **Methodological Applications (II)** *Chair: Tamas Rudas* **Room Neptuno**	C98 Gender pay gap in HR management - How much is it really, and why? C169 Model based analysis of incomplete data with non-ignorable missing data mechanism C214 Differentiated assessment of mathematical competence with multidimensional adaptive testing C251 Comparing Item Response Theory models for non-ignorable missing data
	Symposium 3: **Advances in Meta-analysis** *Chair: Julio Sánchez-Meca* **Room Apolo**	• Random-effects meta-analysis when normality assumption is not met* • A comparison of approaches for quantifying heterogeneity in meta-analysis • To pool or not to pool? The issue of the estimation of the residual between-studies variance with categorical variables in meta-analysis • Methodological improvements in training programs • The role of the methodological quality of primary studies in systematic reviews: A meta-review

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Parallel Sessions 6 **12.30 – 14.00**	**Session 11:** **Psychometric cognitive models** *Chair: Miguel A. Sorrel* **Room Discóbolo**	C60 Stochastic curtailment using the isotonic sequential regression model C231 Two-step likelihood ratio test for model comparison in cognitive diagnosis models C232 Computerized Adaptive Testing for cognitively based multiple-choice data C303 Test construction for cognitive diagnosis using the global discrimination index C331 A method for evaluating the explanatory power of the Q-matrix in the linear logistic test model
	Session 12: **Meta-analysis** *Chair: Belén Fernández-Castilla* **Room Neptuno**	C256 Cross-classified meta-analytic models C294 The importance of the meta-analysis restricted to studies with statistically significant results
	Symposium 4: **Categorical data in the analysis of research in Giftedness and Talent** *Chair: África Borges* **Room Apolo**	• Differences in mechanisms of social interaction of gifted children based on peer acceptance • Analysis of the level of verbal creativity in adolescents according to their intelligence • A qualitative study of the educative response of Mexican teachers of outstanding students • Program evaluation through activities

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Parallel Sessions 7 **16.30 – 18.00**	**Symposium 5:** **Methodology of Interdisciplinary Research (I) Where do we stand?** *Chair: Hilde Tobi* **Room Neptuno**	• The CREAM European Project: exploring the creative brain from a multidisciplinary perspective • Developing creativity in STEM education towards sustainability • Developing process-based measurements to evaluate collaboration in innovation team interactions • Pain management in German nursing homes – An interdisciplinary approach • Geometric design by interactive and evolutionary design methods
	Session 13: **IRT models** *Chair: Timo Bechger* **Room Apolo**	C139 IRT based equating: About equating error and the equating design C186 Measurement of research performance capacity using bibliometric data – A Bayesian Rasch model for count data C276 Comparison of the capacity of three nonparametric person-fit indexes to detect different aberrant response patterns on real data C334 Development of a descriptive fit statistic for the Rasch Model
	Symposium 7: **Scaling of competence test data in large scale assessments: Accounting for missing values, longitudinal, and hierarchical data** *Chair: Steffi Pohl* **Room Discóbolo**	• Using response times to deal with missing responses due to time limits in competence tests • Missing values in IRT-analyses of large-scale assessments: Do model-based approaches perform well under different underlying missing values processes? • Investigating anchor item selection methods under various conditions of systematic DIF • Tracking the true link: A simulation study on linking Rasch-scaled longitudinal competence data in a large scale framework • Efficient measurement of change: Designs to link paper-based fixed-form test and computer-based multi-stage tests • Disentangling interviewer and area effects in large scale educational assessments through multilevel IRT-models

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Parallel Sessions 8 **9.00 – 10.30**	**Symposium 6:** **Methodology of Interdisciplinary Research (II) What about the future?** *Chair: Hilde Tobi* **Room Neptuno**	• The plurality of research methods in interdisciplinary design thinking creativity studies and the challenge of building up joint knowledge • Interdisciplinary measurement: A systematic review of the case of sustainability • The dynamic definition of creativity: A starting point for the multidisciplinary science of creative thinking • Towards the interdisciplinary measurement of urban sustainability: A European Delphi study
	Session 14: **Simulation** *Chair: Matthias Kaeding* **Room Discóbolo**	C63 Multiple imputation by predictive mean matching when sample sizes are small C108 Fast, approximate MCMC for Bayesian analysis of large data sets: A design based approach C224 Estimating causal mediated effects in the presence of baseline and post-treatment confounders: A simulation study C293 Effects of systematic measurement error on the results of Propensity Score Matching. A simulation study
	Symposium 9: **Going Beyond Simple OLS Regression Coefficients: Novel Approaches for Analyzing Effects in Complex Models with Latent Variables and Interactions** *Chair: Axel Mayer* **Room Apolo**	• Average effect of a binary treatment variable on a latent outcome variable measured by binary indicators • Model-based composite scores as dependent and independent variables in effect analyses • The problem of re-aggregation in logistic regression • The probabilistic index as an effect size in a regression context • Analyzing effects of interventions in complex survey designs: A comparison of six approaches

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Parallel Sessions 9 **11.00 – 12.30**	**Symposium 10:** **Methodological Innovations in programs evaluation: Quality and effectiveness from evidence** *Chairs:* *Salvador Chacón-Moscoso and Susana Sanduvete-Chaves* **Room Apolo**	• The development of a checklist to enhance methodological quality since 2000 • A simulation study of threats to validity in quasi-experimental designs: Interrelationship between design, measurement, and analysis • Detection of T-Patterns as an appropriate tool for searching efficacy in program evaluations of specific psychological interventions • Test construction process for measuring the quality of the labor climate in the Emergency Department of a healthcare organization
	Session 15: **Psychometric foundations** *Chair: Ana Hernández* **Room Discóbolo**	C78 The item-position effect in the Raven's Advanced Progressive Matrices and its relationship to impulsivity C89 A new model for acquiescence at the interface of Psychometrics and Cognitive Psychology C121 Resolving the test fairness paradox by reconciling predictive and measurement invariance C182 Assessing test quality: A revision of the Spanish test review model
	Session 16: **Data Analysis (III)** *Chair: Eduardo Estrada* **Room Neptuno**	C252 How to evaluate the effectiveness of an intervention in a randomized controlled trial from the individual change perspective C280 Self organizing maps as a novel tool for data analysis in education C282 Difficulties and solutions in the construction of an instrument to detect teen sexting

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Parallel Sessions 10 **12.30 – 14.00**	**Session 17:** **Observational and Quasi-experimental designs** *Chair: Yasemin Kisbu-Sakarya* **Room Neptuno**	C225 Comparative regression discontinuity: Results of a within study comparison C263 Life satisfaction and different domain satisfaction of microentrepreneurs in Ecuador: Assessing the relationship between access to credit and subjective well-being C44 Identifying ergonomic issues in a moving food parlour in Western India through direct observation and activity analysis C300 Bargaining and gender perception of microentrepreneurs in Ecuador: Entrepreneurial decision-making patterns
	Session 18: **Psychometric latent structures** *Chair: Javier Revuelta* **Room Discobolo**	C226 A Monte Carlo study of recovery of weak factor loadings when adding the mean structure in confirmatory factor analysis C228 Assessment of Horn's parallel analysis with bi-factor and second-order models C261 Dimensionality assessment for a Nominal Item Response model in a Bayesian framework
	Symposium 12: **Challenges and benefits of mixed methods studies: Contributions of mixed designs in diverse psychological areas** *Chair: Isabel Benítez* **Room Apolo**	• A mixed methods review: Integrating quantitative and qualitative evidence about cognitive-motor interference in gait in multiple sclerosis patients • An exploratory and sequential qual-quan mixed method design for the validation of moral emotion measures • Quantitizing qualitative data: A challenge of mixed methods • Mixed methods designs for obtaining validity evidence

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Poster Session 1 10.30-11.00	Applied Methodology Coffee-break Hall	• P40 Proposal of a SEM model on the relationship between stress, burnout and depression in a sample of athletes • P54 Evaluation of a new care model in Psychiatry in Germany: A retrospective cohort study using the claims data of patients with schizophrenia • P171 T-patterns, lag sequential analysis and polar coordinate analysis: Observational study in fencing • P183 The interplay of affective experiences and daily events within person: Evidence from Gaussian and Poisson vector auto regressions • P184 Methodological complementarity for studying daily life: Classification criteria • P217 Multilevel approach for understanding adolescents' self-concept and attitude towards school, and their influence on academic achievement • P229 Stability and consistency of attachments in dyads of parents and emerging adults • P259 Phenomenological analysis for the study of emotional concepts in a sample of undergraduate students • P260 The longitudinal design research in an observational study for measurement the change and differences observed in childhood • P262 Integrating categorical and continuous data to analyze the effects of a varied exercise workout program in adult women: a methodological challenge • P288 Comparative analysis on possession time and zone in successful and unsuccessful elite teams • P339 Financial transactions: Comparing T-Pattern analysis with conventional methods • P341 Meaning scientific and technical knowledge versus knowledge popular p value in university professors and students

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Poster Session 2 10.30-11.00	Psychometrics Coffee-break Hall	• P31 Psychometric basic requirements: Calibration of mathematical performance instrument • P36 Continuous time IRT models • P57 Analysing Likert-type scales using Generalized Linear Mixed Models: A simulation study • P79 Application of situational strength to the construction of personality measurement items • P119 Gender-based measurement invariance of a scale for assessing entrepreneurial orientation in the educational field • P138 A multilevel MTMM latent state-trait graded response model for interchangeable and structurally different methods • P279 Spanish adaptation of the Attitudes toward domestic violence scale • P299 Differential item functioning of Pisa for schools mathematics items • P321 Nonparametric statistics and validity in QB64: RANDOMCO.BAS and PARAMENO.BAS • P324 RELIABIL.BAS 1.0: Coefficients alpha, L-alpha and omega, as latent class detectors in QB64 • P327 Elaborate and amends questions of Methodology Bases with answers T/F in QB64 • P328 Program MTP.BAS v. 1.4 (Multi Personality Questionnaire) for answers T-F in QB64 • P330 WEIGHT.BAS v. 3.9: questionnaire in QB64 and psychological rules, medical and social

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Poster Session 3 **10.30-11.00**	**Statistical methods** **Coffee-break Hall**	• P33 Equivalence test of variances and sample size calculation • P52 Applying Pearl's general causal effect formula to Gaussian linear structural equation models • P56 Robustness of ANOVA with non-normally distributed data • P120 Tests of indistinguishability between roles in small clusters • P207 Gaussian process panel modeling – A new, flexible analysis method for panel data • P220 It's not that bad: selective publishing and p-hacking in Journal of Experimental Psychology: General (1994-2014) • P223 The effects of asymmetry and direction on the level of statistical power using the modified Brown-Forsythe and mixed-model approaches in split plot designs • P285 Power analysis to detect the treatment effect in longitudinal studies when the change over time is linear and heterogeneous errors • P296 Red card or yellow card. Missing data or card to the end • P297 The elimination of subjects. The same practice to solve different problems • P318 MEANDESV.BAS v. 1.3: measures of central tendency and dispersion in QB64 • P338 Maintenance/variability of hidden detected relations from two data analysis techniques: T-Patterns and polar coordinates