## CONFERENCE PROGRAM

**Monday 14 September 2015**  
**Registration 08:00 – 16:30**

<table>
<thead>
<tr>
<th>TIME</th>
<th>BOWETT ROOM (80)</th>
<th>ARMITAGE ROOM (40)</th>
<th>ERASMUS ROOM (50)</th>
<th>ANGEVIN ROOM (25)</th>
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| 08:45 – 10:15 | **Workshop 1**  
Computerized Multistage Adaptive Testing  
Duanli Yan, Alina von Davier and Kyung “Chris” Han (GMAC) | **Workshop 2**  
CAT simulations: how and why to perform these?  
Presenter: Angela Verschoor and Theo Eggen (*Cito and University of Twente*) | **Workshop 3**  
An introduction to CAT  
Presenter: Nate Thompson (ASC) | **Workshop 4**  
Building and delivering online CAT using open-source Concerto Platform  
Presenter: Michal Kosinski (Stanford) |
| 10:15 – 10:30 | Break                                                                             |                                                                                   |                                                                                  |                                                                                  |
| 10:30 – 12:00 | **Workshops continued**                                                            |                                                                                   |                                                                                  |                                                                                  |
| 12:00 – 12:45 | **Lunch**                                                                         |                                                                                   |                                                                                  |                                                                                  |
| 12:50 – 13:00 | **Opening and Welcome**  
John Rust (*Psychometrics Centre*)                                                      |                                                                                   |                                                                                  |                                                                                  |
| 13:00 – 13:30 | **Presidential address**  
Title: Improving precision of CAT measures  
John Barnard (*EPEC*) |                                                                                   |                                                                                  |                                                                                  |
| 13:30 – 14:10 | **Keynote presentation 1**  
Topic: A self-replenishing Adaptive test  
Wim van der Linden (*Pacific Metrics Corporation*)  
Chair: John Barnard |                                                                                   |                                                                                  |                                                                                  |
<table>
<thead>
<tr>
<th>Time</th>
<th>Parallel Session 1 (Symposium)</th>
<th>Break</th>
<th>Parallel Session 7 (Symposium)</th>
<th>Break</th>
<th>Parallel Session 13 (Symposium)</th>
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<tr>
<td>14:10 – 14:30</td>
<td>Parallel Session 1 (Symposium)</td>
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<td>Parallel Session 7</td>
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<td>Chair: Alina von Davier</td>
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<td>Chair: Shiyu Wang</td>
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<td>Chair: Gage Kingsbury</td>
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<td>14:30 – 16:00</td>
<td><strong>Topic: CAT around the world</strong></td>
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<td><strong>Topic: New developments in CAT by graduate students at UIUC</strong></td>
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<td><strong>Topic: Some bothersome problems for operational CAT and some potential solutions</strong></td>
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<td>Presenters:</td>
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<td></td>
<td>Tetsuo Kimura: CAT developments in Japan</td>
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<td>Study 1 (Hyeon-Ah Kang, Yi Zheng &amp; Hua-Hua Chang): Online Calibration Strategies for a Joint Model of Item Responses and Response Times in CAT</td>
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<td>Anthony Zara: Producing CAT scores for test takers who run out of time</td>
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<td></td>
<td>Marie de Beer: CAT in South Africa</td>
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<td>Study 3 (Edison M. Choe, Jinming Zhang &amp; Hua-Hua Chang): Utilizing Response Time in Sequential Detection of Compromised Items in CAT</td>
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<td>G. Gage Kingsbury: Can CAT give us knowledge about idiosyncratic performance?</td>
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<td>John Rust: CAT in the United Kingdom</td>
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<td>16:00 – 16:15</td>
<td><strong>Parallel Session 2 (Symposium continued)</strong></td>
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<td><strong>Parallel Session 8 (Symposium continued)</strong></td>
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<td><strong>Parallel Session 14</strong></td>
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<td>Chair: Alina von Davier</td>
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<td>Chair: Shiyu Wang</td>
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<td>Chair: Shungwon Ro</td>
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<td>16:15 – 17:45</td>
<td><strong>Topic: CAT around the world - continued</strong></td>
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<td><strong>Topic: New developments in CAT by graduate students at UIUC - continued</strong></td>
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<td><strong>Topic: A computer-adaptive measure of delay discounting</strong></td>
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<td>Presenters:</td>
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<td>Study 4 (Chanjin Zheng &amp; Hua-Hua Chang)</td>
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<td>Presenter: Vaishali Mahalingam, Michael Palkovics, Michal</td>
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<td>Andreas Frey: CAT in German speaking</td>
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**Study 5 (Susu Zhang & Hua-Hua Chang): The Relationship between Q-Matrix Specification and Item Exposure Rate in CD-C** | Kosinski & David Stillwell  
**Topic: Improving CAT test fairness with comparable latency for pretest items**  
Presenter: Sung-Hyuck Lee, Bruce Williams, Wugen Dai, Richard Sullivan & Jason He  
**Topic: Computer adaptive measurement of quality of life across cultures: Results from IRT and CAT simulation studies**  
Presenter: Chris Gibbons  
**Topic: A Variable Length CAT for Ranking Data in Forced Choice Assessments**  
Presenter: Shungwon Ro, Chia-Wen Chen, Wen-Chung Wang and Xue-Lan Qiu |  
| Mariana Curi: CAT developments in Brazil. |  
| Alina von Davier: Adaptive tests in the USA |  
| 18:30 | Welcoming reception: Fitzwilliam museum |
### Tuesday 15 September 2015

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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| 09:00 – 09:40    | **Keynote presentation 2**  
Title: Multidimensional CAT: Calibration, model fit and secondary analysis  
Cees Glas (*University of Twente*)  
Chair: Theo Eggen |
| 09:40 – 10:15    | **Early Career Researcher Award**  
Title: Optimal Design and Scoring for Adaptive Multi-Stage Testing: A Tree-Based Approach  
Duanli Yan (*ETS*)  
Chair: John Barnard |
| 10:15 – 10:30    | **Break**                                                                                 |
| 10:30 – 12:00    | **Parallel Session 3**  
Chair: Nate Thompson  
**Topic: A practical model for CAT development**  
Presenter: Nathan Thompson  
**Topic: An exploratory study of starting a CAT with a non-scaled item pool**  
Presenter: Deborah Harris, Chunyan Liu & Troy Chen  
**Topic: Moving the New Zealand Progressive Achievement Tests into the Computer Adaptive Domain**  
Presenter: Hilary Ferral  
**Parallel Session 9**  
Chair: Haniza Yon  
**Topic: Development of a computerized adaptive face perception test**  
Presenter: Roeland Verhallen & Luning Sun  
**Topic: Development of an adaptive integrity test**  
Presenter: Haniza Yon, Norsyahida Abd Kadir, Nur Ayu Johar & Nur Mutalib  
**Topic: Response Formats and Trait Estimation Efficiency in Computerized Adaptive Testing**  
Presenter: Yin Lin & Anna Brown  
**Parallel Session 15**  
Chair: Marie de Beer  
**Topic: Evaluating the comparability of CAT tests across test delivery platforms**  
Presenter: Agnieszka Walczak & Ardeshir Geranpayeh  
**Topic: Empirical comparison of scoring rules at early stages of CAT**  
Presenter: David Magis  
**Topic: An Improved Online Item Calibration Method for Multidimensional Computerized Adaptive Testing**  
Presenter: Ping Chen, Chun Wang & Jihong Xu |
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<tr>
<th>12:00 – 12:55</th>
<th>Lunch / IACAT Board meeting</th>
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<tr>
<td>13:00 – 13:40</td>
<td><strong>Keynote presentation 3</strong></td>
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<td><strong>Title: Some exciting new developments concerning CAT foundations and implementations</strong></td>
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<td>Hua-Hua Chang (<em>University of Illinois</em>)</td>
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<td>Chair: Nate Thompson</td>
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<td>13:45 – 15:15</td>
<td><strong>Parallel Session 4</strong></td>
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<td>Chair: Andreas Frey</td>
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<td>13:00 – 16:15</td>
<td><strong>Parallel Session 10</strong></td>
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<td>Chair: Alper Şahin</td>
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<td>15:15 – 15:30</td>
<td>Break</td>
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<td>15:30 – 16:15</td>
<td><strong>Keynote presentation 4</strong></td>
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<td><strong>Topic: The future of CAT should be open source</strong></td>
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<td>Michal Kosinski (<em>University of Stanford</em>)</td>
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<td>Chair: John Rust</td>
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**Parallel Session 4**
- **Topic: Which way did he go?: An examination of routing and scoring in a ca-MST**
  - Presenter: Andrew Dallas & Richard Luecht
- **Topic: Development of Multi Stage Tests based on teacher ratings.**
  - Presenter: Stephanie Berger
- **Topic: Multistage Testing with routing based on performance on different test sections**
  - Presenters: Kyung (Chris) Han, Fanmin Guo & Eileen Talento-Miller
  - **Topic: CloudCAT: Implementing CAT as a Web-service**
  - Presenter: Haniza Yon, Rense Lange, Nur Aïnshah, Abid Altaf & Norsyahida Kadir
- **Topic: How IRT helps LinguaLeo to build accurate placement procedures.**
  - Presenter: Dmitry Abakumov
- **Topic: The design and development of a web-based adaptive Raven’s-like automatic test generator**
  - Presenter: Isaac Thimbleby
- **Topic: Effects of errors in item parameter estimates on recovery of theta estimates in CAT**
  - Presenter: Alper Şahin & David J. Weiss

**Parallel Session 10**
- **Topic: Improvement and evaluation of a small-scale ESP CAT**
  - Presenter: Tetsuo Kimura & Yukie Koyama
- **Topic: A successful experiment of computer adaptive test of abilities in the graduate employability development domain**
  - Presenter: V Natarajan
- **Topic: An application of computerized adaptive testing in audiological assessment**
  - Presenter: Wayne Garrison & Joseph Bochner
- **Topic: Estimating reliability in Linear on the fly (LOFT) designs**
  - Presenter: Tammy Trierweiler
**Wednesday 16 September 2015**

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<th>Time</th>
<th>Event</th>
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| 09:00 – 09:40 | **Keynote presentation 5**  
  Topic: Happy CAT: Options to allow test takers to review and change responses in CAT  
  Kyung (Chris) Han (*GMAC*)  
  Chair: Alina von Davier |
| 09:40 – 10:15 | **Keynote presentation 6**  
  Topic: Test construction based on the Rasch Poisson counts models  
  Heinz Holling (*University of Muenster*)  
  Chair: John Rust |
| 10:15 – 10:30 | **Break** |
| 10:30 – 12:00 | **Parallel Session 5**  
  Chair: Gage Kingsbury  
  Topic: Comparing CATS and the block review method in providing review options in CAT  
  Presenter: Zhongmin Cui, Chunyan Liu, Yong He & Hanwei Chen  
  Topic: Identifying item enemies in a CAT pool using a chi-square goodness-of-fit test  
  Presenters: Brian Bontempo, Steve Wise, Gage Kingsbury & Ron Houser  
  Topic: Optimal greedy item selection for constrained tests  
  Presenter: Daniel Bengs  
  Topic: A Partial Likelihood Method for Computerized Adaptive Testing to Allow for Response Revision  
  Presenter: Shiyu Wang  
  Topic: Evaluating effectiveness of standard error of score estimation as a termination criterion in CAT.  
  Presenter: Chansoon Lee  
  Topic: Rules induction based method for the item selection in computer adaptive testing.  
  Presenter: Maria Rafałak  
  Topic: Latent Class Based Item Selection for CAT in |
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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| 12:00 – 12:55   | Progress Tests.  
Presenter: Nikky van Buuren  
Testing  
Presenter: Sebastian Born |
|                 | Lunch                                                                                                     |

| Session 6       | Parallel Session 12 (Early career researchers Part 2)  
Chair: Richard Luecht  
Topic: Transitioning from linear testing to Multistage Testing: A case study.  
Presenter: Maaike van Groen  
Topic: Design and implementation of a large-scale computer-3-4 zed adaptive multistage testing system for reading and listening  
Presenter: Richard Luecht  
Topic: The development of a computerized adaptive test with online calibration  
Presenter: Angela Verschoor & Stephanie Berger |
|                 | Parallel Session 18  
Chair: John Barnard  
Presenter: Meirav Arieli-Attali  
Topic: Weighted-Probability Based Classification for Computerized Classification Testing.  
Presenter: Victoria Song  
Topic: Item selection criteria for Logistic Positive Exponent model-based Computerized Adaptive Testing  
Presenter: Thales Akira Matsumoto Ricarte  
Topic: Application of the Adaptive Measurement of Change to Measuring Achievement Growth in Reading and Mathematics  
Presenters: Chaitali Phadke, David J. Weiss & Theodore Christ |

| 13:00 - 14:30   | Topic: Multidimensional IRT versus Mean Adjustment in Estimating Cognitive Ability Scores  
Presenter: Darrin Grelle  
Topic: Item Selection Method Based on Attribute Mastery Probability for CD-CAT  
Presenter: Xiaofeng Yu  
Topic: The first stage items selection methods of CD-MST  
Presenter: Chunlei Gao, Zhaosheng Luo, Chanjin Zheng, Xiaofeng Yu, Peida Zhan  
Topic: Two ways to unleash CAT’s true potential  
Presenter: Thomas Garrard |

| 14:35 – 15:05   | Keynote presentation 7  
Topic: Learning parameters in learning environments: Trials and tribulations  
Kevin Wilson (Knewton)  
Chair: Cliff Donath |

| 15:05 – 15:30   | Wrap-up and closing |