IACAT 2021
International Association for Computerized Adaptive Testing

October 10-12 2021
Goethe-University Frankfurt, Germany

CALL FOR PAPERS

The International Association for Computerized Adaptive Testing (IACAT) invites you to submit a proposal for a presentation or a symposium at its biannual conference, which will take place on October 10 – 12, 2021 at the Goethe University Frankfurt, Frankfurt am Main, Germany. We will accept the submission of proposals up until April 30, 2021, 11:59 PM CET.

CONFERENCE THEME

At the conference current developments on *Enhancing Testing and Assessment in the Digital Age with Computerized Adaptive Testing* are presented and discussed. Computerized Adaptive Testing (CAT) is a highly efficient and flexible measurement approach that is based on item response theory (IRT) models and originates from psychometrics and educational measurement. Parallel to CAT-related research and development, the computer science-driven field of Artificial Intelligence (AI) has also developed strongly in recent years. One area of AI research and development is adaptivity and its use for measurement and learning. However, CAT and AI have so far only partially taken note of each other's approaches and results. This may lead to one area struggling in certain points and having to start from scratch even though the other area has already resolved those same points. As a starting point to overcome this, the IACAT 2021 Conference in Frankfurt will link the two areas in an interdisciplinary fashion. Researchers from both areas, CAT and AI, are warmly invited to present and discuss their current research and developments regarding adaptive measurement and testing. We believe that both areas can thereby learn from each other and thus take full advantage of the technology that is available in the digital age.

LOCAL CONFERENCE COMMITTEE

Prof. Dr. Andreas Frey (chair)
Dr. Christoph Koenig (coordination)
Aron Fink
Anette Stache
Dr. Svenja Hammerstein

VENUE

Frankfurt am Main is the fifth-largest city in Germany, with a population of 750,000. The city is at the center of the Rhine-Main Metropolitan Region; it is easy to reach from both European and international locations as it has the largest airport in Germany. Besides the Goethe University, Frankfurt is home to other influential research institutions, such as the Leibniz Institute for Research and Information in Education (DIPF), and to numerous renowned cultural venues such as the concert hall Alte Oper and the Museum Riverbank Frankfurt. Frankfurt is also famous for its skyline, which is shaped by some of Europe's tallest skyscrapers and its cosmopolitan, international atmosphere in the immediate vicinity of historic quarters and timber-framed houses.

The IACAT 2021 conference will be hosted by the Goethe University Frankfurt. With more than 45,000 students and a strong research record, the Goethe University is one of the major German universities. Several research groups at the university and associated research institutes are devoted to research on educational measurement and psychometrics. The conference will take place on the University's new Westend Campus, which is characterized by its central yet quiet location adjacent to a city park.

PROGRAM

We are delighted that Tony Zara (Pearson, USA), Ying Cheng (University of Notre Dame, USA), Wim van der Linden (University of Twente, The Netherlands), Bernard Veldkamp (University of Twente, The Netherlands), and the winner of the IACAT Early Career Researcher Award will give keynotes at the IACAT 2021. Moreover, renowned experts will give half-day workshops on CAT-related topics on Sunday, October 10.

The scientific program of the IACAT 2021 Conference will consist of individual paper presentations and symposia. Individual paper presentations will be 20 minutes long and will be grouped together with other presentations in joint sessions. Symposia will group four to five thematically related contributions and can include a discussant.

We welcome both methodological research and practical applications of CAT and AI in assessment. Contributions should be related to at least one of the following strands:

- Automatic item generation with machine learning algorithms
- Automatic scoring in CAT with AI models
- Bayesian approaches to CAT
- CAT applications
- CAT in large-scale assessments
- Cognitive diagnosis in CAT
- Constraint management in CAT (e.g., content balancing; exposure control)
- Detection of disengagement and cheating with AI
- Formative adaptive assessment
- Item banking
- Item pool design
- Item selection methods
- (M)IRT models in CAT
- Multistage testing
- Natural language processing in CAT
- Online calibration
- Usage of AI to score oral responses
- Software for CAT development and application
- Statistical foundations of CAT
- Systems and models connecting learning and adaptive testing

Abstracts can now be submitted through our submission system (iacat2021.com/submission).

AWARDS AND GRANTS

In order to encourage further research and advancement in the area of CAT, IACAT established the Early Career Researcher Award, as well as Student Presentation Grants.

The IACAT Early Career Researcher Award is a prestigious award intended to support early career researchers in the field of CAT. The recipient of this award will receive a 1,000 USD travel grant and will be invited to give a keynote lecture about their research at the upcoming IACAT 2021 Conference.

Additionally, it is possible for students (PhD or MSc) who wish to present their research at the IACAT 2021 Conference to apply for a Student Presentation Grant. Ten grants of up to 1,000 USD are available. Recipients will present their research during the Early Career Researcher Session at the IACAT 2021 Conference.

More information about the eligibility criteria and the application process can be found at https://www.iacat2021.com/grants-awards.

FEES

The conference fee is € 400 (regular) and € 320 for PhD and MSc students. The Early Bird rates are € 350 (regular) and € 280 for PhD and MSc students. The conference fee includes the Welcome Reception on Sunday, October 10, as well as cold and warm drinks, snacks, and lunch during the conference. The workshop fee is € 100 per workshop. Tickets for the Conference Dinner at the Eberbach Monastery can be bought for € 45. The fees for the other social events (see below) can be found on our homepage.

IMPORTANT DATES

December 2020
Submission Open

December 2020
Registration Open

April 30, 2021
Submission Deadline

June 1, 2021
Review Decision

June 15, 2021
Early Bird Registration End

August 1, 2021
Speaker Registration Deadline

August 2021
COVID-19 Decision

September 15, 2021
Conference Program Online

8th IACAT CONFERENCE
October 10 – 12, 2021
Goethe University Frankfurt am Main, Germany

SOCIAL EVENTS

We are working hard to provide participants of the IACAT 2021 Conference with a variety of social events besides the scientific program. Save the date for the Welcome Reception, which will take place on Sunday, October 10, where you can meet up with or get to know your colleagues whilst enjoying the beautiful view over the university campus from the famous Rooftop Terrace of the Campus Central Building.

One of the highlights of the IACAT 2021 Conference will certainly be the Conference Dinner on Monday, October 11, which will take place in the Laiendormitorium of the Eberbach Monastery (https://kloster-eberbach.de/en/eberbach-monastery/). The

Eberbach Monastery is famous for being the film location of The Name of the Rose, starring the late Sir Sean Connery.

For more details and updates on the social events of the IACAT 2021 conference, be sure to check our [homepage](#) regularly!

COVID-19 and IACAT 2021

Unfortunately, the ongoing coronavirus (COVID-19) pandemic presents a significant challenge that makes it difficult to determine the impact on the organization of the IACAT 2021 Conference. Nevertheless, we are confident that the IACAT 2021 Conference in Frankfurt will be one of the first conferences in our field after the COVID-19 pandemic where it will be possible to meet face-to-face and to socialize.

We are keeping a close eye on the unstable situation, both in Germany and internationally. If COVID-19 does not make it possible to host the IACAT 2021 Conference, or in the case of serious travel restrictions, we aim to postpone the conference to 2022. All accepted contributions would be taken over. A cancellation due to the COVID-19 pandemic will result in a 100% refund of all conference fees (for both scientific and social events). We will make the final decision on whether to hold the conference or not by August 2021.