2020 International SBP-BRIMS Annual Conference July 14-17, 2020, Lehman Auditorium, George Washington University, Washington DC, USA

All papers are qualified for the Best Paper Award. Papers with student first authors will be considered for the Best Student Paper Award. Those receiving these awards will be invited to publish an extended version in a special issue of the journal *Computational and Mathematical Organization Theory*.

IMPORTANT DATES:

Regular Paper Submission: 21-Feb-2020 (Midnight EST) Author Notification: 23-March-2020 (Midnight EST) Final Version Submission for Regular Papers: 03-April-2020

Working Paper, Doctoral Consortium, Tutorial, Demo, and Challenge Submission: 15-May-2020

Submit your paper here. Until the final paper deadline, you will be able to update your submission.

Note, all papers undergo a rigorous peer review process for presentation in the plenary, regular, or poster sessions. All papers accepted to the plenary sessions will be published in the archival proceedings - the Springer LNCS volume. Regular papers will be evaluated for either the archival or online proceedings. The remaining tracks will be published online for 1 year on our non-archival conference website. Each accepted paper requires confirmation of conference registration and requires a separate registration.

PAPER FORMATTING GUIDELINE:

The papers must be in English and MUST be formatted according to the Springer-Verlag LNCS/LNAI guidelines. <u>View sample LaTeX2e and WORD files</u>. All regular and working paper submissions should be submitted with a maximum of **10 pages**. Total page count includes all figures, tables, and references.

SPECIAL VALIDATION TRACK:

This year we are soliciting papers for a special workshop on validation to be held during the conference. When submitting your paper in EasyChair please whether you want to be considered for this track.

CHALLENGE PROBLEM:

The conference expects to announce a computational challenge as in previous years. Additional details will be posted in December. Follow us on Facebook, Twitter and LinkedIn to receive updates.

PRE-CONFERENCE TUTORIAL SESSIONS:

Several half-day sessions will be offered on the day before the full conference. More details regarding the tutorial sessions will be posted as soon as this information becomes available.

FUNDING PANEL & CROSS-FERTILIZATION ROUNDTABLES:

The purpose of the cross-fertilization roundtables is to help participants become better acquainted with people outside of their discipline. The Funding Panel provides an opportunity for conference participants to interact with program managers from various federal funding agencies, such as the <u>National Science Foundation</u> (NSF), <u>National Institutes of Health</u> (NIH), <u>Office of Naval Research</u> (ONR), <u>Air Force Office of Scientific Research</u> (AFOSR), <u>Defense Threat Reduction Agency</u> (DTRA), <u>Defense Advanced Research Projects Agency</u> (DARPA), <u>Army Research Office</u> (ARO), <u>National Geospatial Intelligence Agency</u> (NGA), and the <u>Department of Veterans Affairs</u> (VA).

TRAVEL SCHOLARSHIPS:

It is anticipated that a limited number of travel scholarships will be available on a competitive basis to students who are presenting papers. Additional information will be provided soon.

TOPICS:

Submissions are solicited on research issues, methodologies, theories, and applications. Topics of interest include but are not limited to the following:

Advances in Sociocultural & Behavioral Process Modeling

- · Group formation, interaction, and/or evolution
- · Collective action and governance
- · Cultural patterns & representation
- · Social conventions, social contexts and processes
- · Influence process, recognition, and diffusion
- · Public opinion representation, identification and modeling
- · Psycho-cultural situation awareness
- · Intelligent agents and avatars/adversarial modeling
- · Models of reasoning and decision making
- · Performance prediction, assessment, & skill monitoring/tracking
- · Intelligent tutoring systems
- · Cognitive robotics and human-robot interaction
- · Human behavior issues in model federations

Information, Systems, & Network Science

- · Data mining on social media platforms
- Diffusion and other dynamic processes over networks
- · Inference of network topologies and changes over time
- · Analysis of link formations and link types
- · Detection of communities and other types of structures in networks
- · Analysis of high-dimensional networks
- · Analytics for social and human dynamics

Military, Cyber, & Intelligence Applications

- Group formation and evolution in the political context
- · Networks and political influence
- · Group representation and profiling
- · Reasoning about terrorist group behaviors and policies towards them
- · Cyber and attribution
- · Computational methods to transform traditional GEOINT and open source data into spatio-temporal information describing events and activities

Health and Well-being

- · Social network analysis to understand health behavior
- · Modeling of public health and health care policy and decision making
- Modeling of behavioral aspects of infectious disease spread
- · Modeling of behavioral aspects of prevention and treatment for chronic diseases (e.g., cancer, obesity)
- · Intervention design and modeling for behavioral health

Example Other Applications of Interest to the Community

- Economic applications of behavioral and social prediction
- · Model federation, integration, verification, or validation
- Evolutionary computing and optimization
- · Education, training, professional development and workforce training in modeling and simulation