



ANNOUNCEMENT AND CALL FOR POSTERS

Virtual Workshop: **Mental Effort: One Construct, Many Faces?**

July 29, 2020; 42nd Annual Meeting of the Cognitive Science Society

Organizers: Sebastian Musslick, Maria Wirzberger, Ivan Grahek, Laura Bustamante, Amitai Shenhav & Jonathan D. Cohen

Website: <https://sites.google.com/view/mental-effort>

Contact email: mentaleffort2020@gmail.com

===== Important Dates =====

Submission of 250 word abstract: June 29, 2020

Decision of acceptance: July 6, 2020

Workshop: July 29, 2020

===== Call for abstracts =====

Are you working on a project or thesis related to mental effort and want to discuss your ideas? If so, we are inviting you to present a poster during our virtual poster session.

To apply, please submit a 250 word abstract as PDF to mentaleffort2020@gmail.com

Your submission title should follow the format "LastName_poster.pdf".

Conference registration fees are being offered at substantially reduced rates and the Cognitive Science Society is offering free membership

For more information about the CogSci virtual poster format see:

<https://cognitivesciencesociety.org/cogsci-virtual/>

===== **Scope and Goal of the Workshop**=====

We can all feel exhausted after a day of work, even if we have spent it sitting at a desk. The intuitive concept of mental effort pervades virtually all domains of human information processing and has become an indispensable ingredient for general theories of cognition. However, inconsistent use of the term across cognitive sciences, including cognitive psychology, education, human-factors engineering and artificial intelligence, makes it one of the least well-defined theoretical constructs across fields.

A number of recent approaches lay the foundation for a consensus by offering formal accounts of mental effort. Yet, reaching a multifield-wide consensus on the operationalization of mental effort will require cross-talk between different empirical and computational approaches, including symbolic architectures, non-parametric Bayesian statistics and neural networks. The purpose of this full-day workshop is to review and integrate these emerging perspectives. To achieve this goal, we invited experts in these fields to present an accessible summary of their research, and allocate ample time for dialogue and audience participation across two panel discussions and a poster session. Key questions of discussion will include (but are not limited to):

- What are the experimental phenomena that lay a foundation for theories of mental effort?
- What is the common ground in operationalizing mental effort across different domains of cognitive science?
- Which modeling approach(es) is (are) best suited to answer which questions regarding mental effort?

The workshop is specifically designed to attract scholars with expertise in different modeling frameworks who seek to expand their interest to other methodologies.

===== **List of Speakers**=====

Matthew M. Botvinick (Google Deepmind, University College London)

Jonathan D. Cohen (Princeton University, Princeton Neuroscience Institute)

Ivan Grahek (Brown University)

Thomas L. Griffiths (Princeton University)

Wouter Kool (Washington University in St. Louis)

Sebastian Musslick (Princeton University)

Lena Rosendhal (Princeton University)

Nele Russwinkel (Technische Universität Berlin)

Amitai Shenhav (Brown University)

Eliana Vassena (Radboud University)

Tom Verguts (Ghent University)

Maria Wirzberger (University of Stuttgart)