

Virtual Small Group Meeting January 21st-22nd 2021

- DOCUMENTATION -

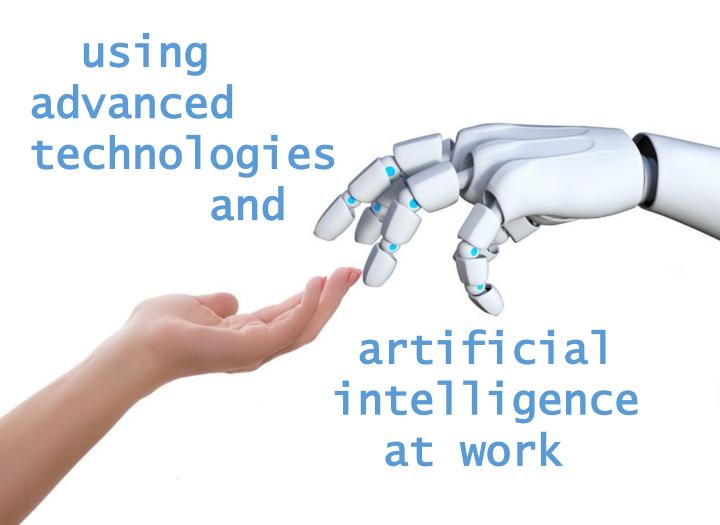
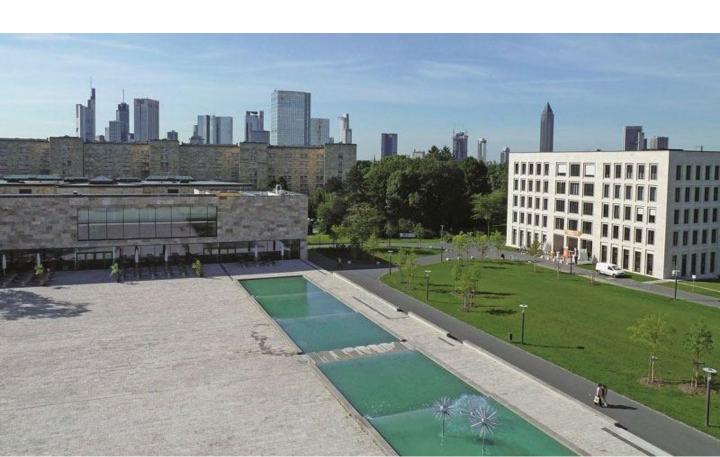


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Preface

In this documentation booklet, you will find information about the SGM the conference program, details on participants including presentations, links to posters and pre-recorded presentations as well as the recordings of the live keynotes.

Organizing committee



Anna-Sophie Ulfert





Sonja Rispens



Pascale M. Le Blanc



Sonja Scherer



Maria C.W. Peeters

First of all, we thank **EAWOP** for selecting our proposal for an SGM and for encouraging the organizers to start a cooperation. We are very happy about this opportunity. We enjoyed working together very much and will continue our cooperation in the future.

A special thanks to the **supporting team** of our colleagues at Goethe University Frankfurt.

Thanks for your help and technical support during the SGM!



Marc Drognitz PhD candidate



Daniel Probst Student Assistant



Carolin Baier Student Assistant Student Assistant



Carina Koch

Moreover, we would like to personally thank several persons who have inspired us, have given valuable advice in the process of planning the SGM and the EJWOP special issue, or have supported the realization of this SGM.

Thank you very much for sharing your ideas!

David Holman

Professor for Organisational Psychology at University of Manchester

Guido Hertel

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Professor for Business Psychology at University of Kassel

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Professor for Work and Organisational Psychology at Goethe University Frankfurt

Holger Horz

Professor for Educational Psychology at Goethe University Frankfurt

Belgin Okay-Somerville

Lecturer at Adam Smith Business School, University of Glasgow

Thursday, Jan. 21st				
10:00- 10:15	Introduction			
10:15 – 11:00	Keynote (live) José M. Peiró: The impacts of digitalization on work and organizations: Challenges for work and organizational psychology			
11:00 – 11:15	Break			
11:15 – 12:15	 Presentations (live) Hannah Berkers: The influence of robots on work characteristics Markus Langer: Trust in automation for managerial decisions: Differential trust violation and trust repair effects between human and automated decision-support Judith Plomp: For better or for worse: The Impact of RPA technology on work characteristics and well-being 			
12:15 - 13:15	Lunch Break			
13:15 – 14:15	Interactive Session			
14:15 - 14:30	Break			
14:30 – 15:30	Panel Discussion Nadezhda Gotcheva, Gudela Grote , Jilles Smids, José M. Peiró			
15:30 – 15:45	End of day 1			

Friday, Jan. 22nd				
10:00- 10:15	Introduction			
10:15 – 11:00	Keynote (live) Gudela Grote: How to move work and organizational psychology (back) towards a socio-technical design orientation			
11:00 – 11:15	Break			
11:15 – 12:35	 Presentations (live): Bettina Kubicek: The impact of positive and negative feedback from a humanoid robot on individual's self-esteem in a performance situation Martijn Jungst: Advanced technologies and team dynamics Maximilian Zeyda: When your body tells more than words: Predicting perceived meeting productivity through body signals Jilles Smids: Technology and the ethics of design for meaningful work. The case of logistic warehouses 			
12:35 <i>-</i> 13:35	Lunch Break			
13:35 – 14:35	 Short Sessions (pre-recorded presentations): A) Trust Jenny Wesche: Individuals' reactions to selection decisions by human vs. algorithmic decision-makers: Two experiments on individuals' trust and acceptance Miriam Höddinghaus: Automated leadership: Do people trust decision algorithms? B) Healthcare Nadine Bienefeld-Seall: Human-AI teaming in future work systems: An analysis and design recommendations in the example of acute care teams Nadezhda Gotcheva: Exploring ethical issues arising from working with artificial intelligence technologies in the healthcare work life 			
14:35 – 14:50	Break			
14:50 – 16:05	Poster Session			
16:05 – 16:15	End of day 2 (Wonder room will remain open for socializing)			

José M. Peiró:

José M. Peiró has been President of the IAAP (2011-2014), and Professor of Social and Organisational Psychology at the Department of Social Psychology, University of Valencia (UV). He has been founding Director (2009-2018) of the Research Institute IDOCAL (UV). His main areas of interest and research include work stress, work teams, job flexibility and insecurity, organizational climate and culture. He received the award of the Spanish Socio-Economic Council as coauthor of the book Socioeconomic impact of digital transformation in Spain (2020)

University of Valencia



Keynote: The impacts of digitalization on work and organizations: Challenges for work and organizational psychology

This key note will first present a number of megatrends that puts into context the important transformations of current societies paying special attention to the deep transformations digitalization is producing in the world of work, labour markets and organizations. I will consider, in this context, the transformation of the professions due to different digital innovations such as artificial intelligence, blockchain, big data, cobots and robots, computing in the cloud or the internet of things, among others. Then I will focus on the challenges these changes and disruptions pose to our discipline paying special attention to the new demands and new opportunities that pose to W&O psychologists. Finally, I will revise the implications all these changes have for competencies required for professional work.

The recorded keynote is available online:

https://video01.uni-frankfurt.de/Mediasite/Play/41e1a9e18661463b9a0739dfca9864c21d

ETH Zürich



Gudela Grote:

Gudela Grote is a full Professor of Work and Organizational Psychology at the Department of Management, Technology, and Economics at the ETH Zurich. The main objective of her research is to provide psychologically based concepts and methods for integrative job and organizational design, taking into consideration the changing technological, economic and societal demands and opportunities.

Keynote: How to move work and organizational psychology (back) towards a socio-technical design orientation

In this talk I will outline different approaches that have been taken to understanding and shaping the interactions between organization, work, and technology. In recent years, a descriptive and explanatory perspective has prevailed which considers technology mostly as an independent variable affecting work and organizational processes and outcomes. While understanding the impact of technology is crucial, it is important to also use that knowledge to shape technology in ways that foster the quality of working life. I suggest a few actions that different stakeholders in work and organizational psychology can take to promote this more proactive approach to the digital transformation.

The recorded keynote is available online:

The panel discussion focused on ethics, work design, the role of work and organizational psychologists, and how advanced technologies and AI will shape the future of work.

Nadezhda (Nadja) Gotcheva

Nadezhda Gotcheva (Phd) is a Research Team Leader of "Safety in complex sociotechnical systems" team in VTT Technical Research Centre of Finland Ltd. Her main areas of research are safety culture and leadership in the nuclear power industry. She is certified Foresight Practitioner (Institute for the Future, United States). Currently, she is a Foresight lead of "Ethical Al for the Governance of the Society" (ETAIROS) project, funded by Strategic Research Council at the Academy of Finland, where she future trajectories of Al and its societal impacts.





Gudela Grote

is introduced on the previous page (keynote speakers).

Jilles Smids

Dr. Jilles Smids is a Postdoctoral researcher at Erasmus Medical Center Rotterdam. He studied Chemistry and Philosophy, and his PhD thesis was on the ethics of behaviour change technology. Currently he investigates ethical questions around cancer therapies that are deemed too expensive for reimbursement under national health insurance. He also performs research on the ethics of technology and meaningful work.





José M. Peiró

is introduced on the previous page (keynote speakers).

Participant	Paper	Session
Berkers, Hannah Amsterdam University of Applied Sciences	Berkers, Rispens, & Le Blanc: The influence of robots on work characteristics	Presentation
Bienefeld-Seall, Nadine ETH Zürich	Bienefeld & Grote: Human-AI teaming in future work systems: An analysis and design recommendations in the example of acute care teams	Short Session Healthcare
Bracht, Eva Goethe University Frankfurt	Bracht, Misterek, She, Hernandez-Bark, van Dick, & Junker: <i>Digital leadership and phubbing: Balancing digital enthusiasm and digital overuse</i>	Poster
Georganta, Eleni Technological University Munich	Georganta & Niess: Interactive technologies supporting team effectiveness: A systematic literature review	Poster
Giusino, Davide University of Bologna	Giusino, de Angelis, & Pietrantoni: Al-based tools to promote mental health and wellbeing in the workplace: A systematic overview and theoretically grounded assessment of market-available products and services	Poster
Gloor, Peter MIT Center for Collective Intelligence	Zeyda, Stracke, Knipfer & Gloor: When your body tells more than words: Predicting perceived meeting productivity through body signals	Presentation
Gotcheva, Nadezhda VTT Technical Research Centre of Finland	Gotcheva, Hallamaa, Kalliokoski, & Leikas: Exploring ethical issues arising from working with artificial intelligence technologies in the healthcare work life	Panel + Short Session Healthcare
Grote, Gudela ETH Zürich	How to move work and organizational psychology (back) towards a socio-technical design orientation	Panel + Keynote
Höddinghaus, Miriam University of Muenster	Höddinghaus, Sondern, & Hertel: Automated leadership: Do people trust decision algorithms?	Short Session Trust
Jakubowitz, Tobias HTW Dresden	Jakubowitz, Oeste, & von der Weth: Agent-based modelling as a method for prospective work design	Poster
Jungst, Martijn EDHEC Business School	Jungst: Advanced technologies and team dynamics	Presentation
Kubicek, Bettina University of Graz	Kubicek & Marx: The impact of positive and negative feedback from a humanoid robot on individual's selfesteem in a performance situation	Presentation

Participant	Paper	Session
Langer, Markus Universität des Saarlandes	Langer, König, & Busch: Trust in automation for managerial decisions: Differential trust violation and trust repair effects between human and automated decision-support	Presentation
Marx, Cyril University of Graz	Kubicek & Marx: The impact of positive and negative feedback from a humanoid robot on individual's selfesteem in a performance situation	Presentation
Nyholm, Sven Utrecht University	Smids, Berkers, Le Blanc, Rispens, & Nyholm: Technology and the ethics of design for meaningful work. The case of logistic warehouses.	Presentation
Peiró, José M. University of Valencia	Peiro: The impacts of digitalization on work and organizations: Challenges for work and organizational psychology	Panel + Keynote
Plomp, Judith Utrecht University	Plomp & Peeters: For better or for worse: The impact of RPA technology on work characteristics and wellbeing	Presentation
Smids, Jilles Erasmus University Rotterdam	Smids, Berkers, Le Blanc, Rispens, & Nyholm: Technology and the ethics of design for meaningful work. The case of logistic warehouses	Presentation
Sondern, Dominik University of Muenster	Höddinghaus, Sondern, & Hertel: Automated leadership: Do people trust decision algorithms?	Short Session Trust
Stracke, Selina Technical University of Munich	Zeyda, Stracke, Knipfer & Gloor: When your body tells more than words: Predicting perceived meeting productivity through body signals	Presentation
Wesche, Jenny S. Freie Universität Berlin	Wesche, Quade, Kollhed, & Kluge: Individuals' reactions to selection decisions by human vs. algorithmic decision-makers: Two experiments on individuals' trust and acceptance	Short Session Trust
Zeyda, Maximilian Technical University of Munich	Zeyda, Stracke, Knipfer & Gloor: When your body tells more than words: Predicting perceived meeting productivity through body signals	Presentation
Zornoza Abad, Ana University of Valencia		Passive Participation

The short session presentations were pre-recorded and the participants of the SGM watched the videos in advance so that we had more time for discussions during our meeting. The videos will still be available online until the end of the year 2022.

1. Bienefeld & Grote:

Human-AI teaming in future work systems: An analysis and design recommendations in the example of acute care teams

https://video01.uni-

<u>frankfurt.de/Mediasite/Play/1578363a3f424970b532d3</u> 3b5c2f8f551d

2. Höddinghaus, Sondern, & Hertel:

Automated leadership: Do people trust decision algorithms?

https://video01.uni-

<u>frankfurt.de/Mediasite/Play/3e5ecae04ba24bfa878302</u> <u>e0e71e93111d</u>

3. Gotcheva, Hallamaa, Kalliokoski, & Leikas: Exploring ethical issues arising from working with artificial intelligence technologies in the healthcare work life https://video01.uni-frankfurt.de/Mediasite/Play/8a3420d2db884025b7d5d 79d608f71e21d

4. Wesche, Quade, Kollhed, & Kluge:

Individuals' reactions to selection decisions by human vs. algorithmic decision-makers: Two experiments on individuals' trust and acceptance

https://video01.uni-

<u>frankfurt.de/Mediasite/Play/014a90948e8040cdb275b2</u>be213bbf421d

Poster sessions took place on Wonder where participants could roam around and meet up with the presenters of the poster.

The posters are available for download on the eawop website:

http://eawop.org/reports

Overview of posters presented:

1. Bracht, Misterek, She, Hernandez-Bark, van Dick, & Junker:

Digital leadership and phubbing: Balancing digital enthusiasm and digital overuse

2. Georganta & Niess:

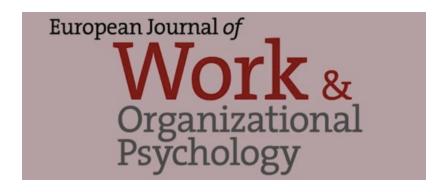
Interactive technologies supporting team effectiveness: A systematic literature review

3. Giusino, de Angelis, & Pietrantoni:

AI-Based tools to promote mental health and wellbeing in the workplace: A systematic overview and theoretically grounded assessment of market-available products and services

4. Jakubowitz, Oeste, & von der Weth:

Agent-based modelling as a method for prospective work design



SPECIAL ISSUE CALL FOR PAPERS

Adapting to Emerging Technologies at Work: Effects on the Nature of Work and Employee Outcomes

Guest Editors:

Anna-Sophie Ulfert (Goethe University, Frankfurt, Germany)
Sonja Rispens (Eindhoven University of Technology, the Netherlands)
Pascale M. Le Blanc (Eindhoven University of Technology, the Netherlands)
Sonja Scherer (Goethe University, Frankfurt, Germany)
Maria C.W. Peeters (Eindhoven University of Technology and Utrecht University, the Netherlands)

Full manuscripts should be submitted by **September 1st, 2021** (updated deadline).

Papers should be submitted through the journal's online submissions system via http://mc.manuscriptcentral.com/pewo, as a submission for this Special Issue.

https://think.taylorandfrancis.com/special issues/european-journalorganizational-psychology-emergingtechnologies/?utm source=TFO&utm medium=cms&utm campaig n=JPG15743

We look forward to your submissions!

You find further information on the following pages.

Technological innovations are being developed rapidly and are revolutionizing a wide array of industries (Parker & Grote, 2020). To give a few examples, take the use of robots to disarm and remove explosives in military operations (Peake, 2017), in medical settings where doctors collaborate with robots to make surgery less invasive and more precise (Pratt, 2018), or in logistic warehouses where robots like Amazon's Kiva retrieve products for order pickers. Other examples are the algorithms which manage Uber drivers (Zwick, 2018) and chatbots that can take care of customer service tasks or certain HR services (Meyer von Wolff et al., 2019). Whether it is to comply with increasing customer demands (in e-commerce for instance) or to mitigate the (future) shortage of labor (in the health care or logistics sector for instance), business motives spur organizations to buy and implement continuously advancing technologies, such as robots or artificial intelligence (AI) systems (Berkers et al., 2019; Parker & Grote, 2020). At the same time, employees seem to have a more ambivalent attitude towards these technologies, some fear to fall behind and while others embrace the opportunities of technology-related change (Berkers et al., 2019; Ulfert & Scherer, 2020).

Currently, many companies seem to invest mainly in the technological innovation itself, instead of focusing on the human side of working with these technologies. These emerging technologies, including for example Smart Technologies, Al, Robotics, and Algorithms (Brougham & Haar, 2018), have been argued to fundamentally change how employees work today and in the future (see e.g. Parker & Grote, 2020). This particularly includes a change in how we interact with technology, involving a shift of agency from the employee to the technology, as systems become increasingly competent in self-learning (Parker & Grote, 2020; Schwab, 2017). Although, the study of technology interaction at work has a longstanding research tradition in psychology (e.g. studying automation in manufacturing settings), the described shift in agency that comes with increasing system capabilities, has not yet been adequately addressed concerning its consequences for organizations and employees. As a consequence, researchers have emphasized the importance of studying both how humans adapt to these technologies as well as how work and technology can be designed to better fit employee needs (Parker & Grote, 2020; Wang et al., 2020). For effective implementation and adoption of emerging technologies at work, it is of pivotal importance to pay attention to the people who work with these technologies. We argue that Work and Organizational psychologists have much to contribute to understanding these technology-related changes in the workplace and to the development of emerging technologies. However, these developments are currently predominantly driven from the technology sectors. Building on accumulated evidence of 100 years of research on how to design jobs that facilitate employee well-being, motivation, and performance (Parker et al., 2017), Work and Organizational psychology can help to make the tech revolution more 'humancentered'.

Our goal with this Special Issue is to stimulate a scientific discussion on (1) the effects of introducing emerging technologies, and especially AI systems, in the workplace as well as (2) the role work and organizational psychologists can play in the development and introduction of these technologies. This will help to build new theories and sound practices regarding a human-centered development and implementation of emerging technologies at work. We argue that we need to move beyond merely discussing whether technologies threaten jobs and job security (Frey & Osborne, 2013; Parker & Grote, 2020). Rather, we need to examine how technologies will shape work in the future and how we can design high-quality work (Wang et al. 2020). Already today, we experience a technology-related change of work characteristics, such as job demands, autonomy, relational aspects, and job significance (Wang et al., 2020), which has been described to intensify with increasing technology capabilities (e.g. AI; Ulfert & Scherer, 2020).

Although theoretical models give a first indication of how the use of emerging technologies, and particularly AI, may change the work environment (e.g. Parker & Grote, 2020; Wang et al. 2020), there is still a lack of empirical studies on the way these technologies shape work today as well as the factors that impact employee outcomes. Therefore, in order to gain a deeper understanding of consequences and influencing factors, we need to further investigate questions such as, how employees appraise these technologies, how jobs and job quality change, and how responsibilities shift from employees to the technology.

We further argue that existing theories and models are too limited to guide both researchers and practitioners. For example, technology acceptance theories and models (Venkatesh & Bala, 2008; Venkatesh et al., 2016) aim to predict acceptance and adoption of technology by individual users. These models are distanced from the reality of the work context, only partially considering the complex and dynamic structures of the organizations in which these technologies are implemented. The organizational change literature on the other hand, points at the key role of human and social (context) factors for successful transitions, such as adequate top-down and bottom-up communication, (opportunities for) participation, and support (see Hayes, 2018, for an overview). However, this tradition hardly considers technology-related change and is less clear about the operational changes to which employees need to adapt. Furthermore, research in the human computer interaction domain, although very informative about how individuals react to and work with (or against) technology, often miss to address the larger social context (for an exception see Díaz-Boladeras et al., 2015) and do not explicitly focus on the work context.

To develop new theories and sound practices for implementing emerging technologies in organizations, we need to start discussing the topic of emerging technologies, and particularly AI, on a multi-disciplinary level, with a strong perspective from Work and Organizational psychology perspective.

That is to say, more in-depth research on human/social context factors affecting the (optimal) implementation of technologies in the workplace, and effects on for example job quality and employee well-being is needed to formulate recommendations for a human-centered implementation of technology in the workplace.

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Proposed contributions (field and experimental studies as well as high quality theoretical papers) for the Special Issue could include:

Overview and current developments in the use of emerging technologies /AI at work:

Multidisciplinary views (combining theories from computer science, Work and Organizational Psychology, and practice) on current trends, applications, and misconceptions.

Submissions should particularly focus on how these emerging technologies and AI differ from other technologies used in the work context (e.g. research on automation in factories).

Transformation & implementation of emerging technologies and AI at work:

How does work change (e.g. how do new types of teams, such as human-agent teaming, interact)?

How can these technologies be implemented while taking work context and human factors into account?

Consequences of emerging technologies and AI at work:

What are positive and negative effects of implementing these systems at work?

How does the role of the employee change (e.g. how does a change of agency in human-AI collaboration affect employee outcomes)?

Al methods in Work and Organizational Psychology research:

How can we use methods of AI in research within Work and Organizational Psychology to understand how we interact with emerging technologies and AI at work?

How can Work and Organizational Psychology researchers contribute to building better AI systems?

Timeline

Submission deadline: September 1st 2021

Reviews + decision round 1: December 1st, 2021

Resubmission deadline: February 1st, 2022

Reviews + decision round 2: May 1st, 2022

Final submission round 3: September 1st, 2022

Publication of the Special Issue by spring 2023

Submission Instructions

We seek innovative contributions and encourage high-quality theoretical or empirical papers across a range of methodologies and analytical techniques. Please note that the regular author guidelines of EJWOP apply (e.g. no studies with only student samples), for further details, please visit:

https://www.tandfonline.com/action/authorSubmission?show=instr uctions&journalCode=pewo20

Full manuscripts should be submitted by May 1st, 2021. Papers should be submitted through the journal's online submissions system via http://mc.manuscriptcentral.com/pewo, as a submission for this Special Issue.

For more information or to discuss ideas for the Special Issue, please contact any of the Guest Editors:

Anna-Sophie Ulfert (ulfert@psych.uni-frankfurt.de),

Sonja Rispens (s.rispens@tue.nl),

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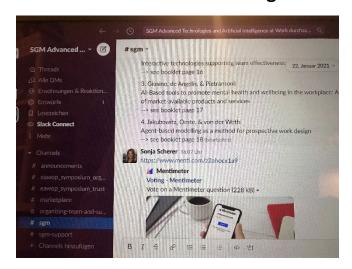
Sonja Scherer (scherer@psych.uni-frankfurt.de) or

Maria Peeters (m.peeters@uu.nl)

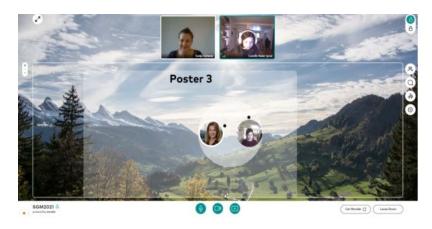
Getting together on zoom for the presentations



Using slack as a communication tool during the SGM



Walking around and interacting on wonder for poster presentations



Using mentimeter for surveys during the SGM

What are the biggest challenges when using advanced technologies and AI at work?

Responses of the SGM's partcipants:

