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Scientific Session Programme

Beyond the 'Anthropocene': Where Mankind and Machines Converge

When **About the Scientific Session**

Monday 25 July 2016
15.45–17.00

We increasingly rely on technology, yet we struggle to find answers to the questions that its development poses. What are the consequences of the notion of 'technological singularity', the point at which mankind and machines converge? How can we understand the implications of the coming wave of technological change? Are these developments to be welcomed, or are they to be feared?

Where

ESOF 2016
Manchester Central
Conference Centre

At ESOF 2016, as part of the 'Living in the Future' theme, Science Europe's scientific session aims to look at the interaction between humans and technology, alongside the evolution and development of fundamental scientific understanding and technological change.

Central to the session is the analysis of the existing tension between scientific curiosity, ethics, and responsible research based on the interplay between multiple scientific disciplines. It combines the perspectives from these disciplines to address the issue of technological resilience, and to create an interactive exchange across different fields and with the audience on the societal implications of technological change for the future of humanity.

The discussion will explore topics which are central to the questions of how we think, how our mind is challenged by technological development and change, and what the consequences are of automation on our ways of performing tasks. Controversial issues, such as the benefits of technological advance, the risks linked to dependence on technology, its influence on human behaviour and cognitive functions, and its consequences on society in terms of a changing perception of what it means to be human, will be part of the debate as well.

Both the scientific discussants and the audience are asked to focus on a key question that is linked to the perception we have of our own relationship with technology: **is technology 'part of you', or is technology 'to be feared'?**

Format of the Session

The scientific session is divided into two parts: a panel discussion and an interactive round table, including a 'pro & con debate'.

The panel discussion will focus on the perspective from the humanities, the social sciences, and the medical sciences on the concept of technological singularity in a 'post-Anthropocene' era. The interactive round table will explore issues such as human enhancement and the opportunities of extended cognition in human-machine interaction on the one hand, and threats of an uncertain future, the existential risk posed by technology, and human-human social interaction versus human-machine communications on the other. The idea is to outline the boundaries within which humans and machines can effectively converge, how they can do so, what the benefits and limits are, and how scientific interdisciplinarity can influence our understanding of these problems.



**SCIENCE
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Shaping the future of research

Programme

Monday 25 July 2016

ESOF 2016, Manchester Central Convention Centre

15.45–15.50 Welcome to Science Europe's Scientific Session
Mariachiara Esposito, Senior Scientific Officer at Science Europe

Panel Discussion **Understanding Concepts and Challenges**

Moderator: **Michael Wheeler**, Professor of Philosophy, University of Stirling

15.50–15.55 Introduction: From the Anthropocene towards Technological Singularity
Michael Wheeler

15.55–16.05 The Human Factor at the Centre of Radical Innovation
Ola Erstad, Head of Department of Education, Oslo University

16.05–16.15 Modelling the Future of Human Well-being
Annette Grüters-Kieslich, Dean, Charité-Universitätsmedizin Berlin, Vice-President, Berlin-Brandenburg Academy of Sciences

16.15–16.25 Responsible Research: Meeting Societal Needs and Ethical Expectations
Patrick Paul Walsh, International Development Studies, University College Dublin

16.25–16.30 Questions & Answers

Interactive Round Table **Exploring the Implications**

Facilitator: **Mattia Gallotti**, 'The Human Mind Project' Manager and Research Fellow in Philosophy, University of London

16.30–16.50 Presentations and Open Debate

- **Michael Wheeler**
- **Colin Blakemore**, Professor of Neuroscience and Philosophy at the School of Advanced Study, University of London

Results and Conclusions **Technology: A Part of You, or To Be Feared?**

16.50–17.00 Final remarks and wrap-up
Mattia Gallotti

