

fPET 2024  
Program Overview

Time	Session						
<b>Tuesday, 17th of September</b>							
9:00 - 12:00	<b>Registration</b>						
9:00 - 09:45	<b>First Coffee</b>						
9:45 - 10:20	<b>Welcome and Practicalities (Room A - hybrid)</b>						
10:20 - 11:10	<b>Keynote 1 - Erik Fisher (Room A - hybrid)</b>						
11:10 - 11:20	<b>Coffee Break</b>						
11:20 - 12:30	<b>Session 2A:</b> Engineering Ethics Education 1 Chair: Christine Mächram	<b>Session 2B:</b> AI and Health Technology Chair: Jon Rueda	<b>Session 2C:</b> Futures of Sustainable Engineering 1 Chair: Augustinus Setyo Wibowo	<b>Session 2D:</b> AI Developments and Challenges 1 Chair: Emma Cavazzoni	<b>Session 2E:</b> Engineering Knowledge and Understanding 1 Chair: Marianne van Panhuys	<b>Session 2F:</b> Military Technology Ethics Chair: Christine Boshuizen - van Burken	
12:30 - 14:00	<b>Lunch</b>						
14:00 - 15:45	<b>Session 3A:</b> Engineering Knowledge and Understanding 2 Chair: Giovanni Frigo	<b>Session 3B:</b> Political and Ethical Issues in AI, Gender, and Health Chair: Joan Llorca Albareda	<b>Session 3C:</b> Futures of Sustainable Engineering 2 Chair: Clément Lasselin	<b>Session 3D:</b> AI Developments and Challenges 2 Chair: Daria Jadreskic	<b>Session 3E:</b> The Role of the Engineer Chair: Andrea Gammon	<b>Session 3F:</b> Values in the European Union's Transition and Transformation Policies Chair: Anna Jacyzyn	<b>Session 4G EXP. SESSION:</b> Interdisciplinary Speculations for the Future of Biohybrid Robots Chair: Session Convener
15:45 - 16:15	<b>Coffee Break</b>						
16:15 - 17:25	<b>Session 4A:</b> New Methods in Engineering Education Chair: Christine Mächram	<b>Session 4B:</b> AI in Sensitive Domains Chair: Udo Pesch	<b>Session 4C:</b> Futures of Sustainable Engineering 3 Chair: Ivano Zanzarella	<b>Session 4D:</b> Theoretical Issues in the Philosophy of Engineering and Technology 1 Chair: Avigail Ferdman	<b>Session 4E:</b> Boundary Objects and Category Theory Chair: Martin Stacey	<b>Session 4F:</b> Futures, Technological Visions, and Imaginaries 1 Chair: Mareike Smolka	
17:30 - 18:30	<b>Session 5:</b> Poster Session Location: ZKM Building			<b>Session 6:</b> Vernissage of fPET Art Exhibitions Location: HIG Ground Floor			
18:30 - 21:30	<b>Opening Speeches, ZKM Exhibition, and Reception</b>						

Time	Session						
<b>Wednesday, 18th of September</b>							
08:30 - 12:00	<b>Registration</b>						
08:30 - 18:30	<b>Posters and fPET Art Exhibitions (available all day)</b>						
09:05 - 10:10	<b>Session 8A:</b> AI Developments and Challenges 3 Chair: Christine Mächram	<b>Session 8B:</b> Responsible Technology Development Chair: Camilla Quaresmini	<b>Session 8C:</b> Political Philosophy of Engineering and Technology 1 Chair: Diane Michelfelder	<b>Session 8D:</b> Theoretical Issues in the Philosophy of Engineering and Technology 2 Chair: Mark Addis	<b>Session 8E:</b> Global Perspectives on Engineering Education Chair: Deniz Sarakaya	<b>Session 8F:</b> Futures, Technological Visions, and Imaginaries 2 Chair: Neelke Doorn	<b>Session 8G EXP. SESSION:</b> Civic-Minded Engineers and Wicked Problems Chair: Session Convener
10:10 - 10:45	<b>Coffee Break</b>						
10:45 - 12:30	<b>Session 7A:</b> Limitations of Technological Progress Chair: Giovanni Frigo	<b>Session 7B:</b> AI Ethics Chair: Sebastian Krügel	<b>Session 7C:</b> Political Philosophy of Engineering and Technology 2 Chair: Irene Niet	<b>Session 7D:</b> Theoretical Issues in the Philosophy of Engineering and Technology 3 Chair: Rafael Coimbra	<b>Session 7E:</b> Theoretical Perspectives on AI Chair: Beatrice Bonami	<b>Session 7F:</b> Principles and Practices of Responsible Research and Innovation 1 Chair: Philipp Neudert	<b>Session 7G EXP. SESSION:</b> Ways to Get: Philosophy of Engineering Taken Seriously by Engineers Chair: Session Convener
12:30 - 14:00	<b>Lunch</b>						
14:00 - 15:45	<b>Session 9A:</b> AI and Responsibility Chair: Giovanni Frigo	<b>Session 9B:</b> Digital Ethics and AI Chair: Katharine Brichack	<b>Session 9C:</b> Sustainable Engineering and Technology Assessment Chair: Joost Mollen	<b>Session 9D:</b> Engineering Design and Innovation 1 Chair: Muhammad Abubakr	<b>Session 9E:</b> Know How and Tacit Knowledge Chair: Claudia Eckert	<b>Session 9F:</b> Principles and Practices of Responsible Research and Innovation 2 - Socio-Technical Integration Research Chair: Max Roßmann	<b>Session 9G EXP. SESSION:</b> Innovating Educational Approaches in Engineering Ethics: Experiencing Space, Power, and Social Relations, and Imagining Responsible (Technological) Futures Chair: Session Convener
15:45 - 16:15	<b>Coffee Break</b>						
16:15 - 17:25	<b>Session 9A:</b> Design and Values Chair: Christine Mächram	<b>Session 9B:</b> Ethics of Autonomous Vehicles Chair: Nils Neuhaus	<b>Session 9C:</b> Fundamental Questions in Technology Ethics Chair: Ibo van de Poel	<b>Session 9D:</b> Engineering Design and Innovation 2 Chair: Carl Mächram	<b>Session 9E:</b> New Approaches in Engineering Education Chair: Inga-Maria Eichentopf	<b>Session 9F:</b> Epistemology and Ethics in Design Chair: Zach Pirtle	<b>Session 9G PANEL:</b> Roundtable Discussion: The Role of Theoretical Foundations of the Philosophy of Technology and Engineering Ethics in Engineering Education Chair: Session Convener
17:40 - 18:30	<b>Keynote 2 - Mieke Boon (Room A - hybrid)</b>						
18:30 - 19:00	<b>Break</b>						
19:00 - 22:00	<b>Conference Dinner (at ZKM)</b>						

Time	Session						
<b>Thursday, 19th of September</b>							
8:30 - 12:00	<b>Registration</b>						
8:30 - 17:30	<b>Posters and fPET Art Exhibitions (available all day)</b>						
9:00 - 10:10	<b>Session 11A:</b> Digital Ethics Chair: Christine Mächram	<b>Session 11B:</b> Deep Fakes Chair: Page Benton	<b>Session 11C:</b> Experimental Approaches Chair: Ashley Shew	<b>Session 11D:</b> Theoretical Issues in the Philosophy of Engineering and Technology 4 Chair: Nico Farnanek	<b>Session 11E:</b> Engineering Ethics Education 2 Chair: Otten Gruba	<b>Session 11F:</b> Values in Technology Chair: Kaspar Ampe	<b>Session 11G EXP. SESSION:</b> Workshop: Reviewing for Early Career Scholars - A Bridge Towards Scholarly Expertise and Fair Practice Chair: Session Convener
10:10 - 10:45	<b>Coffee Break</b>						
10:45 - 12:30	<b>Session 12A:</b> Justice and Participation Chair: Christine Mächram	<b>Session 12B:</b> Risk and Trust Chair: Andrés Santa-María	<b>Session 12C PANEL:</b> Retooling: Maintenance and Philosophy of Technology Chair: Session Convener	<b>Session 12D:</b> Engineering and Religion Chair: Colum Finnegan	<b>Session 12E:</b> Engineering Ethics Education 3 Chair: Sarah Carter	<b>Session 12F:</b> Digitalization and AI Chair: Tjke Devriese	<b>Session 12G PANEL:</b> The Multiple Languages of Engineering I Chair: Session Convener
12:30 - 14:00	<b>Lunch</b>						
14:00 - 15:45	<b>Session 13A:</b> Engineering Design and Innovation 3 Chair: Giovanni Frigo	<b>Session 13C EXP. SESSION:</b> Transdisciplinary and Participatory Research and Innovation: Philosophical Questions and Practical Challenges Chair: Session Convener	<b>Session 13E EXP. SESSION:</b> Interactive Exploration of Possible Climate Actions With the Ev-ROADS Simulator Chair: Session Convener	<b>Session 13F:</b> Interdisciplinary Studies of Technologies and Infrastructures Chair: Pieter Vermaas	<b>Session 13G PANEL:</b> The Multiple Languages of Engineering II Chair: Session Convener		
15:45 - 16:15	<b>Coffee Break</b>						
16:15 - 17:05	<b>Keynote 3 - Astrid Linder (Room A - hybrid)</b>						
17:05 - 17:30	<b>Closing Remarks and End of fPET 2024</b>						
TRACKS	Engineering and Technology Education	Ethics, Social Philosophy, and Political Philosophy in Engineering and Technology	Philosophy of Engineering and Technology	Epistemology of Engineering and Technology	Interdisciplinary Studies of Engineering and Technology (e.g. TA, RLVS, STS, etc.)	Other	

## Program Details

Time	Session	Chair	Content	Location
<b>Tuesday, 17th of September</b>				
9:00 - 12:00	Registration			
9:00 - 09:45	<b>First Coffee</b>			
9:45 - 10:20	Welcome and Practicalities			Room A (Hybrid)
10:20 - 11:10	Session 1		<b>Keynote 1: Necessary Conditions for the Duty Plus Respicere: Explicating the Capacity of Engineers to "Take More into Account"</b> Erik Fisher	Room A (Hybrid)
11:10 - 11:20	<b>Coffee Break</b>			
11:20 - 12:30	<b>Session 2A:</b> Engineering Ethics Education 1	Christine Milchram	<ul style="list-style-type: none"> <li>Sarah Junaid: Entrepreneurship as an Essential Vehicle for Ethical Skills Development (*)</li> <li>Yuqi Peng: A Rubik's Cube-Inspired Pedagogical Tool for Teaching and Learning Engineering Ethics (*)</li> <li>Cynthia Pickering, Erik Fisher: Cultural Experience as a Source of Ethical Reasoning in STEM Education (*)</li> <li>Agostino Cera: De-Metaphorizing Technology: The Question of Human-Technology Relation (*)</li> </ul>	Room A (Hybrid)
	<b>Session 2B:</b> AI and Health Technology	Jon Rueda	<ul style="list-style-type: none"> <li>Sarah Carter: That's Too Personal: Defining the Limits of Personalization in Mental Health Chatbots</li> <li>Matthias Uhl, Sebastian Krügel: Distrust in AI-Based Decision Support Systems and Ethical Implications in Medical Decision-Making</li> </ul>	Room B
	<b>Session 2C:</b> Futures of Sustainable Engineering 1	Augustinus Setyo Wibowo	<ul style="list-style-type: none"> <li>Florian Richter: A Philosophical Note on the History of Technology and Progress</li> <li>Thomas Siller, Gearold Johnson: Where Does the Future End?</li> </ul>	Room C
	<b>Session 2D:</b> AI Developments and Challenges 1	Emma Cavazzoni	<ul style="list-style-type: none"> <li>Beyza Nur Guler, Qin Zhu: Navigating Access: The Impact of AI Recruitment Tools on People With Disabilities in the Workplace</li> <li>Marc Heimann: Bridging Heidegger, Psychoanalysis, and Large Language Models (*)</li> <li>Wolfgang Eppler, Reinhard Heil: Towards a Pragmatical Grounding of Large Language Models (*)</li> </ul>	Room D
	<b>Session 2E:</b> Engineering Knowledge and Understanding 1	Marianne van Panhuys	<ul style="list-style-type: none"> <li>Martin Stacey: On the Cartography of Engineering Knowledge</li> <li>Zachary Pirtle: What Does it Mean to Do Peer Review at a 'System Level'? Exploring Life Cycle Reviews and the Independent Assessment of Complex Systems Engineering Projects</li> </ul>	Room E
	<b>Session 2F:</b> Military Technology Ethics	Christine Boshuijzen - van Burken	<ul style="list-style-type: none"> <li>Michael Haiden, Florian Richter: Autonomous Weapons: Considering the Rights and Interests of Soldiers</li> <li>Nathan Wood: Explainable AI in the Military Domain</li> </ul>	Room F
12:30 - 14:00	<b>Lunch</b>			
14:00 - 15:45	<b>Session 3A:</b> Engineering Knowledge and Understanding 2	Giovanni Frigo	<ul style="list-style-type: none"> <li>Martin Stacey, Claudia Eckert: Engineering Knowledge and Soft Skills</li> <li>Yafeng Wang: Criteria of Success for Engineering Accident Investigations: A Question-Centered Account</li> <li>Michael Poznic, Vivek Kant: Structuring of Information for Human Machine Interaction: Engineering Understanding, Complex Sociotechnical Systems, and Interface Design</li> </ul>	Room A (Hybrid)
	<b>Session 3B:</b> Political and Ethical Issues in AI, Gender, and Health	Joan Llorca Albareda	<ul style="list-style-type: none"> <li>Ozan Gurcan: Equality and Reproductive Autonomy in the Genomic Era</li> <li>Adam Briggie: Evaluating the Ethics and Politics of Gender Affirming Care for Trans Youth</li> <li>Zhang Tongkuo: Reflection on the Ethical Issues of Brain Computer Interface from the Perspective of Responsibility Ethics (*)</li> </ul>	Room B
	<b>Session 3C:</b> Futures of Sustainable Engineering 2	Clément Lasselín	<ul style="list-style-type: none"> <li>Gearold Johnson, Thomas Siller: Utopian Visions: A Critique of Mega City 2070</li> <li>Katherine Goodman: The Good of Engineering: From a Current State to a Preferred One</li> <li>Xue Yu: The Emerging Forms of Human-Machine Relation and Its Philosophical Reconstruction in the Era of Deep Intelligence</li> </ul>	Room C
	<b>Session 3D:</b> AI Developments and Challenges 2	Daria Jadreškić	<ul style="list-style-type: none"> <li>Johannes Brinz: Neurormorphic AI: From Simulating Towards Replicating the Brain</li> <li>Beatrice Bonami: Social Organic Authenticity and Non-Western Southern Epistemology as a Core Pathway for Future Artificial Intelligence</li> <li>Arzu Formanek, Robert Miehe, Klaus Erlach, Yannick Baumgarten: Are Biointelligent Systems Intelligent? The Onion Model for Biointelligence (*)</li> </ul>	Room D
	<b>Session 3E:</b> The Role of the Engineer	Andrea Gammon	<ul style="list-style-type: none"> <li>Klaus Erlach, Thomas Bauernhans: How to Formulate a Research Question in Applied Engineering Science: A Systematic Approach</li> <li>Daniel Marom: To Educate Is Not to Engineer - Why It Is Important to Make the Distinction in the Education of Engineers</li> <li>José Antonio Perez-Escobar, Deniz Sarıkaya: Epistemic Butlers and Critical Thinking</li> </ul>	Room E
	<b>Session 3F:</b> Values in the European Union's Transition and Transformation Policies	Anna Jacyszyn	<ul style="list-style-type: none"> <li>Martijn Wiarda, Tristan de Wildt, Neelke Doorn: Do Missions Change Values of Mission-Oriented Innovation Projects? A Responsible Research and Innovation Perspective</li> <li>Irene Niet: EU Public Values Governing the Twin Transition Exposed</li> </ul>	Room F
	<b>Session 3G EXP. SESSION:</b>	Session Convenor	<ul style="list-style-type: none"> <li>Interdisciplinary Speculations for the Future of Biohybrid Robots</li> <li>Rafael Mestre, Ned Barker, Sergey Astakhov, Anibal M. Astobiza, Maria Guix, Joana Burd, Matt Ryan</li> </ul>	Room G
15:45 - 16:15	<b>Coffee Break</b>			
	<b>Session 4A:</b> New Methods in Engineering Education	Christine Milchram	<ul style="list-style-type: none"> <li>Albrecht Fritzsche, Stan Kranc: Science Fiction in Engineering Education: Learnings From the EELISA Initiative</li> <li>Inga-Maria Eichentopf, Hans Kasperidus: Education for a Sustainable Future - Bridging Knowledge and Action</li> </ul>	Room A (Hybrid)

16:15 - 17:25	<b>Session 4B:</b> AI in Sensitive Domains	Udo Pesch	<ul style="list-style-type: none"> <li>• Jon Rueda: Reproductive Autonomy in the Age of Artificial Intelligence</li> <li>• Martina Philippi: How to Address Ethical Problems in a Multi-Perspective Context: Interdisciplinary Challenges of XAI (*)</li> </ul>	Room B
	<b>Session 4C:</b> Futures of Sustainable Engineering 3	Ivano Zanzarella	<ul style="list-style-type: none"> <li>• Augustinus Setyo Wibowo, Johannes Narasetu Widyatmanto: Navigating Through Hydrogen Policymaking by Means of Poiesis</li> <li>• Ted Limbeek: Value-Based Decision-Making in Asset Management of Urban Bridges and Quay Walls (UBQs) (*)</li> </ul>	Room C
	<b>Session 4D:</b> Theoretical Issues in the Philosophy of Engineering and Technology 1	Avigail Ferdman	<ul style="list-style-type: none"> <li>• Rafael Coimbra, Édison Renato: Generative AI, Mixed Reality, and the Simulation Hypothesis</li> </ul>	Room D
	<b>Session 4E:</b> Boundary Objects and Category Theory	Martin Stacey	<ul style="list-style-type: none"> <li>• Matthew Wragg: Constructing Bridges Using Boundary Objects</li> <li>• Claudia Eckert, Mark Addis: Explanatory Frameworks in Complex Change and Resilience System Modelling</li> </ul>	Room E
	<b>Session 4F:</b> Futures, Technological Visions, and Imaginaries 1	Mareike Smolka	<ul style="list-style-type: none"> <li>• Philipp Neudert: The Politics and Poetics of Imagination: Scrutinizing the 'Quality' of Imagination</li> <li>• Maximilian Roßmann: The Different Understandings of Hype: Over-Generalization, Over-Selling, Over-Promising, Over-Resonance, and Over-Shadowing</li> </ul>	Room F
17:30 - 18:30	<b>Session 5</b>		<b>Poster Session</b>  <b>Vernissage of fPET Art Exhibitions</b>	ZKM Building HfG Ground Floor
18:30 - 21:30	<b>Opening Speeches, ZKM Exhibition, and Reception</b>			

#### TRACKS

Philosophy of Engineering and Technology

Ethics, Social Philosophy, and Political Philosophy in Engineering and Technology

Epistemology of Engineering and Technology

Engineering and Technology Education

Interdisciplinary Studies of Engineering and Technology (e.g. TA, RI, VSD, STS, etc.)

Other

(\*) These talks last 15 minutes (including Q&A)

**Wednesday, 18th of September**

<b>08:30 - 12:00</b>	<b>Registration</b>			
<b>08:30 - 18:30</b>	<b>Posters and fPET Art Exhibitions (available all day)</b>		ZKM Building HfG Ground Floor	
<b>09:00 - 10:10</b>	<b>Session 6A:</b> AI Developments and Challenges 3	Christine Milchram	<ul style="list-style-type: none"> <li>Stefan Rinner: Large Language Models and Linguistic Understanding: A Modal Argument</li> <li>Hans Voordijk: AI and User Agency in Civil Engineering Practice: A Postphenomenological Approach (*)</li> <li>Sabine Thuermet: Dancing with Generative AI (*)</li> </ul>	Room A (Hybrid)
	<b>Session 6B:</b> Responsible Technology Development	Camilla Quaresmini	<ul style="list-style-type: none"> <li>Udo Pesch: The Acceptability of Technological Debates</li> <li>Yunxuan Miao: The (Re)Formation of Collective Values in Technology Development: Saliences and Agenda Setting</li> </ul>	Room B
	<b>Session 6C:</b> Political Philosophy of Engineering and Technology 1	Diane Michelfelder	<ul style="list-style-type: none"> <li>Maarten Franssen: How the Philosophy of Technology Can Support the Politics of Technology</li> <li>Avigail Ferdman: AI, Capacity Deskillling and Public Reason</li> </ul>	Room C
	<b>Session 6D:</b> Theoretical Issues in the Philosophy of Engineering and Technology 2	Mark Addis	<ul style="list-style-type: none"> <li>Malvina Ongaro, Daniele Chiffi, Lorenza Petrini: A Pragmatist Approach to Causation in Multi-Risk Research</li> <li>Daria Jadreškić: Inductive Risk Meets Engineering Risk: What Can Quality Control in Engineering Teach Us About Managing Values in Science? Lessons From Studying Technical Reviewing at CERN</li> </ul>	Room D
	<b>Session 6E:</b> Global Perspectives on Engineering Education	Deniz Sarakaya	<ul style="list-style-type: none"> <li>Emmanuel Caillaud, Océane Salignon: The Integration of Ethics Education in French "Grandes Écoles": An Option or a Necessity?</li> <li>Qin Zhu, Beyza Nur Guler, Andrea Gammon, Rockwell Clancy, Scott Streiner, Ryan Thorpe: Exploring How First-Year Chinese Engineering Students Perceive Public Welfare Beliefs and Professional Values</li> </ul>	Room E
	<b>Session 6F:</b> Futures, Technological Visions, and Imaginaries 2	Neelke Doorn	<ul style="list-style-type: none"> <li>Sabine Ammon, Nils Neuhaus: Metaphors as Conceptual Vehicles for Ethical Vision Design: A Case Study on the Role of Metaphors in Research and Development</li> <li>Lidia Yatluk: How to Make a New Science: Organizational Imaginaries of Decentralized Science</li> </ul>	Room F
	<b>Session 6G EXP. SESSION:</b>	Session Convenor	<ul style="list-style-type: none"> <li>Civic-Minded Engineers and Wicked Problems</li> <li>Erhardt Graeff, Guru Madhavan</li> </ul>	Room G
<b>10:10 - 10:45</b>	<b>Coffee Break</b>			
<b>10:45 - 12:30</b>	<b>Session 7A:</b> Limitations of Technological Progress	Giovanni Frigo	<ul style="list-style-type: none"> <li>Nikita Lin: Aesthetic Engineering of the Virtual: A Case Study of Jeffrey Shaw's Media Artworks Between 1989-1998</li> <li>Enrico Piergiacomini: Moral Technology in Francis Bacon: Ancient Atomism and the Sins of Prometheus</li> <li>Aaron Schultz: The Domination of Distraction</li> </ul>	Room A (Hybrid)
	<b>Session 7B:</b> AI Ethics	Sebastian Krügel	<ul style="list-style-type: none"> <li>Joan Llorca Albareda: The Ethical Paradox of Automation: The End of Human Work in the Age of AI</li> <li>Marcell Sebestyén: Moral Mirrors: Lessons for AI Ethics From the Shortcomings of Animal Rights</li> <li>Heike Felzmann: Designing for Relationship: Ethically Relevant Factors in the Design of Long-Term Relational AI</li> </ul>	Room B
	<b>Session 7C:</b> Political Philosophy of Engineering and Technology 2	Irene Niet	<ul style="list-style-type: none"> <li>Lena Fiedler: The Ethical Problem of Gendered Robots</li> <li>Paige Benton: Democratic AI: Justification for a Broad View of Public Reason</li> <li>Hernán Borisonik: Exploring the Political Philosophy of Cryptocurrencies (*)</li> <li>Carl Mitcham: Technology Assessment From the Perspective of Political Philosophy (*)</li> </ul>	Room C
	<b>Session 7D:</b> Theoretical Issues in the Philosophy of Engineering and Technology 3	Rafael Coimbra	<ul style="list-style-type: none"> <li>Natasha Lushetchik: Energetic Circuits of Non-Binary Machines</li> <li>Dilek Yargan, Ludger Jansen, Manfred Drack: A Conceptual Framework to Understand the Unique Position of Biomimetics</li> <li>Albrecht Fritzsche: Who Revolutes? Around Whom? Reading Günther Anders in the Digital Age</li> </ul>	Room D
	<b>Session 7E:</b> Theoretical Perspectives on AI	Beatrice Bonami	<ul style="list-style-type: none"> <li>Daniele Chiffi, Giacomo Zanotti, Viola Schiaffonati: A Philosophical Insight Into Uncertainty in AI</li> <li>Deniz Sarikaya, José Antonio Perez-Escobar: Epistemic Diversity in Education and AI Tools: How We Create Better Tools, by Thinking in Terms of Epistemic Virtues (*)</li> </ul>	Room E
	<b>Session 7F:</b> Principles and Practices of Responsible Research and Innovation 1	Philipp Neudert	<ul style="list-style-type: none"> <li>Karl Dagher, Erik Fisher: Ethics as Trojan Horse</li> <li>Beatrice Bonami: Principles and Practices of Responsible Research and Innovation Towards Foundational Structures for a Technology Decolonization Methodology in the Global South</li> <li>Karen Moesker: Responsible Innovation Principles in Large Infrastructure Systems: Expanding the 'Leaving Ajar' Approach for Practice (*)</li> </ul>	Room F
	<b>Session 7G EXP. SESSION:</b>	Session Convenor	<ul style="list-style-type: none"> <li>Ways to Get Philosophy of Engineering Taken Seriously by Engineers</li> <li>David Goldberg, Katherine Goodman, Zachary Pirtle, Diane Michelfelder, Daniel Marom</li> </ul>	Room G
<b>12:30 - 14:00</b>	<b>Lunch</b>			
<b>14:00 - 15:45</b>	<b>Session 8A:</b> AI and Responsibility	Giovanni Frigo	<ul style="list-style-type: none"> <li>Karen Lancaster: Capacity, Consent, and AI</li> <li>Dane Leigh Gogoshin: Taking Charge of AI</li> <li>Joan Llorca Albareda: Challenging the Agential Nature of AI Responsibility Problems</li> </ul>	Room A (Hybrid)
	<b>Session 8B:</b> Digital Ethics and AI	Katherine Brichacek	<ul style="list-style-type: none"> <li>Camilla Quaresmini, Eugenia Villa, Valentina Breschi, Viola Schiaffonati, Mara Tanelli: Modelling Epistemic Injustice in Innovation Diffusion: A Case Study on Electric Mobility</li> <li>Eugen Pissarskoi: Ethics of Digital Twins of Online Social Networks (*)</li> <li>Bauke Wielinga: Balancing AI Rigidity and the Need for Exceptions: A Virtue-Theoretical Approach (*)</li> </ul>	Room B
	<b>Session 8C:</b> Sustainable Engineering and Technology Assessment	Joost Mollen	<ul style="list-style-type: none"> <li>Diane Michelfelder, Sharon Jones: Sustainable Communities and the Challenge of Caring for Future Generations</li> <li>Elliott Woodhouse: Environmental Ethics and Philosophy of Technology – The Problem of Artificiality and the Acceptability of Geoengineering in Climate Strategy</li> <li>Elisabeth Does, Anna Rifat Klassen: Moralizations in the Debate About Genetic Engineering in Agriculture</li> </ul>	Room C
	<b>Session 8D:</b> Engineering Design and Innovation 1	Muhammad Abubakr	<ul style="list-style-type: none"> <li>Alexander Herwig: A Paradigmatic Framework for Responsible Design Science Research</li> <li>Nico Formanek: Scaling Things Up! The Philosophy of Technology at Scale</li> <li>Eswaran Subrahmanian, Albrecht Fritzsche: Approaching Design Theory From the Perspective of Indian Jaina Logic</li> </ul>	Room D
	<b>Session 8E:</b> Know How and Tacit Knowledge	Claudia Eckert	<ul style="list-style-type: none"> <li>Michael Funk, Albrecht Fritzsche: Engineering Digital Sovereignty? – A New Deal on The Tacit Source</li> <li>Juho Lindholm: The Argumentative Structure of Know How (*)</li> </ul>	Room E
	<b>Session 8F:</b> Principles and Practices of Responsible Research and Innovation 2 - Socio-Technical Integration Research	Max Roßmann	<ul style="list-style-type: none"> <li>Kasper Ampe, Gert Goeminne: Interdisciplinarity in Action: Reflections From Engaged Research With Chemical Engineers</li> <li>Gert Goeminne, Kasper Ampe: Unveiling Narratives of Innovation: A Psychoanalytic Take on Engaged STS Research</li> <li>Lahari Yaddanapudi, Erik Fisher, Julia Hahn: Socio-Technical Integration With Early-Career Researchers in a Large Scale German COVID-19 project</li> </ul>	Room F

	<b>Session 8G EXP. SESSION:</b>	Session Convenor	Innovating Educational Approaches in Engineering Ethics: Experiencing Space, Power, and Social Relations, and Imagining Responsible (Technological) Futures • Filippo Santoni de Sio, Jordi Viader Guerrero, Aarón Moreno Inglés, Andrea Gammon	Room G
15:45 - 16:15	<b>Coffee Break</b>			
16:15 - 17:25	<b>Session 9A:</b> Design and Values	Christine Milchram	• Ordel Brown, Katherine Brichacek, Laura Pigozzi: Operationalizing Empathy in Engineering Design via an Epistemic Tool to Support Equitable Design Outcomes • Anna Melnyk: Design for Value Change as a Climate Action Approach	Room A (Hybrid)
	<b>Session 9B:</b> (Ethics of) Autonomous Vehicles	Nils Neuhaus	• Sebastian Krügel, Matthias Uhl: The Global Perspective on the Risk Ethics of Autonomous Vehicles • Nick Corvino: Randomness as a Solution to the Self-Driving Car Dilemma (*)	Room B
	<b>Session 9C:</b> Fundamental Questions in Technology Ethics	Ibo van de Poel	• Alexander Bagattini, Michael W. Schmidt: Moral Expertise for Emerging Technologies • Jon Rueda: Techno-Moral Progress: Exploring the Technological Mediation of Better Morality	Room C
	<b>Session 9D:</b> Engineering Design and Innovation 2	Carl Mitcham	• Colum Finnegan: Engineering Online Communication Using Mindshaping Theory • Ivano Zanzarella: Mori's Uncanny Valley Historicized. The Epistemological Validity of HRI Quantitative Models on the Test-Bench of the History of Science	Room D
	<b>Session 9E:</b> New Approaches in Engineering Education	Inga-Maria Eichentopf	• David Goldberg: Co-Contraries and Change in Higher Education • Andrés Santa-María: Contemporary Philosophy of Technology and Its Pedagogical Opportunities	Room E
	<b>Session 9F:</b> Epistemology and Ethics in Design	Zach Pirtle	• Sabine Ammon: Ethical Co-Design for Responsible Technology Futures: On the Epistemology and Ethics of Integration in Research and Development • Tilke Devriese: Productive Misunderstanding in Multidisciplinary Design: The Influence of Different Epistemic Backgrounds on Model Comprehension	Room F
	<b>Session 9G PANEL:</b>	Session Convenor	Roundtable Discussion: The Role of Theoretical Foundations of the Philosophy of Technology and Engineering Ethics in Engineering Education • Tom Børsen, Diana Martin, and Gunter Bombaerts	Room G
17:40 - 18:30	<b>Session 10</b>		<b>Keynote 2: Epistemological Responsibility of Engineers</b> Mieke Boon	Room A (Hybrid)
18:30 - 19:00	<b>Break</b>			
19:00 - 22:00	<b>Conference Dinner (at ZKM)</b>			

#### TRACKS

Philosophy of Engineering and Technology

Ethics, Social Philosophy, and Political Philosophy in Engineering and Technology

Epistemology of Engineering and Technology

Engineering and Technology Education

Interdisciplinary Studies of Engineering and Technology (e.g. TA, RI, VSD, STS, etc.)

Other

(\*) These talks last 15 minutes (including Q&A)

**Thursday, 19th of September**

<b>8:30 - 12:00</b>	<b>Registration</b>			
<b>08:30-17:30</b>	<b>Posters and fPET Art Exhibitions (available all day)</b>		ZKM Building HfG Ground Floor	
<b>9:00 - 10:10</b>	<b>Session 11A:</b> Digital Ethics	Christine Milchram	<ul style="list-style-type: none"> <li>• Yuqi Peng: Unveiling AI-Induced Vulnerabilities: The Case of Deepfake Technology (*)</li> <li>• Yuying Sun: Ethical Considerations in the Construction of Digital Deceased People (*)</li> <li>• Ria Ariani: Mapping Ethical Dynamics in Open Science: Data Sharing Challenges in Indonesian Qualitative Society (*)</li> </ul>	Room A (Hybrid)
	<b>Session 11B:</b> Deep Fakes	Page Benton	<ul style="list-style-type: none"> <li>• Katherine Brichacek: Teaching Effective Altruism in an Age of Deepfakes</li> <li>• Clint Hurshman: Robust Social Goods: On the Value of Informational Privacy</li> </ul>	Room B
	<b>Session 11C:</b> Experimental Approaches	Ashley Shew	<ul style="list-style-type: none"> <li>• Deniza Kera, Eilat Navon: AI Standards as a Form of "Pastoral Power" and Biopower in SAE J3016</li> <li>• Joost Mollen: Experiments Without Borders: Research Ethics, Real-World Experimentation, and the Identification Problem (*)</li> </ul>	Room C
	<b>Session 11D:</b> Theoretical Issues in the Philosophy of Engineering and Technology 4	Nico Formanek	<ul style="list-style-type: none"> <li>• Emma Cavazoni: Sharing Data, Sharing Technologies. Data-Technology Communities in Italy.</li> <li>• Zehua Yu: Why Does Similarity Works in Engineering? (*)</li> </ul>	Room D
	<b>Session 11E:</b> Engineering Ethics Education 2	Olena Gruba	<ul style="list-style-type: none"> <li>• Giovanni Frigo: The Caring Engineer</li> <li>• Derek Schuurman: Design Norms and Virtues for Engineering and Computer Science Education and Practice</li> </ul>	Room E
	<b>Session 11F:</b> Values in Technology	Kaspar Ampe	<ul style="list-style-type: none"> <li>• Alok Srivastava: Tracing Responsiveness of Design Change to Value Changes in the Twelve Year History of a New Technology/Product - Semaglutide (Ozempic) Biopharmaceuticals</li> <li>• Pieter Vermaas: Black Boxing Quantum Technologies in a Value-Sensitive-Design Exploration of Security Threats in the Port of Moerdijk</li> </ul>	Room F
	<b>Session 11G EXP. SESSION:</b>	Session Convenor	<ul style="list-style-type: none"> <li>Workshop: Reviewing for Early Career Scholars - A Bridge Towards Scholarly Expertise and Fair Practice</li> <li>• Behnam Taebi, Diana Martin</li> </ul>	Room G
<b>10:10 - 10:45</b>	<b>Coffee Break</b>			
<b>10:45 - 12:30</b>	<b>Session 12A:</b> Justice and Participation	Christine Milchram	<ul style="list-style-type: none"> <li>• Anna Melnyk, Eugen Popa: The Utopian Search for Energy (In)justice and The Need for Moral Pluralism</li> <li>• Janine Gondolf, Stefanie Enderle, Sophie Kuppler: Contested Engagement: A Conceptual Analysis of "the Stakeholders" in Large Infrastructure Projects</li> <li>• Elisabeth Shrimpton, Nazmiye Balta-Ozkan: Operationalising Justice Into Infrastructure Engineering Research: A Focus on Hydrogen Production Technologies (*)</li> <li>• Joost Alleblas : Rethinking Sufficiency (*)</li> </ul>	Room A (Hybrid)
	<b>Session 12B:</b> Risk and Trust	Andrés Santa-María	<ul style="list-style-type: none"> <li>• Eva Pöll: Engineering the Trust Machine</li> <li>• Ibo van de Poel: Acceptable Risk Under Moral Uncertainty</li> </ul>	Room B
	<b>Session 12C PANEL:</b>	Session Convenor	<ul style="list-style-type: none"> <li>Retrofitting: Maintenance and Philosophy of Technology</li> <li>• Mark Thomas Young: Beyond Winner's Bridge: Retrofitting and the Politics of Artifacts</li> <li>• Andrea Gammon: Retrofitting: A Candidate Practice of Environmental Maintenance and Repair</li> <li>• Ryan Wittingslow: Retrofitting Goodman to Talk About Retrofitting</li> </ul>	Room C
	<b>Session 12D:</b> Engineering and Religion	Colum Finnegan	<ul style="list-style-type: none"> <li>• Muhammad Abubakr: Are Engineered River Basins Sentient? A Perspective From Islamic Philosophy</li> <li>• Daniel Marom: The Contribution of Theology to the Philosophy of Engineering: The Example of the Story of the Tower of Babel</li> </ul>	Room D
	<b>Session 12E:</b> Engineering Ethics Education 3	Sarah Carter	<ul style="list-style-type: none"> <li>• Diana Martin: Teaching Engineering Risk and Uncertainty as Ethical Concepts</li> <li>• Jesse Pappas: Character Ethics Education for a Metamodern World</li> </ul>	Room E
	<b>Session 12F:</b> Digitalization and AI	Tilke Devriese	<ul style="list-style-type: none"> <li>• Mareike Smolka, Bas Boom: Imagining AI in Context: (Re-)Analysis of an Interdisciplinary Student Project</li> <li>• Paula Gürtler, Artur Bogucki, Berta Mizsei: Ethical, Legal, and Socioeconomic Aspects in AI Projects (*)</li> <li>• Matthias Razum, Anna Jacyszyn, Linda Nierling, Felix Bach: Leibniz ScienceCampus „Digital Transformation of Research" (*)</li> <li>• SaeBom Song, Andreas Lösch: Openness as Smartness?: Sociotechnical Evolution and Imaginaries of Open Data Initiative and Smart City in the Republic of Korea</li> </ul>	Room F
	<b>Session 12G PANEL:</b>	Session Convenor	<ul style="list-style-type: none"> <li>The Multiple Languages of Engineering I</li> <li>• Peter Pelz, Viet-Anh Nguyen Duc, Alfred Nordmann, Aleksandra Kazakova, Dazhou Wang, Andreas Brenneis</li> </ul>	Room G
<b>12:30 - 14:00</b>	<b>Lunch</b>			
<b>14:00 - 15:45</b>	<b>Session 13A:</b> Engineering Design and Innovation 3	Giovanni Frigo	<ul style="list-style-type: none"> <li>• Clément Lasselin: Engineering Research as a Science: Perspectives From the Philosophy of Science</li> <li>• Ritesh Bansal: Distinguishing Between Nudging and Usability in the Context of Product Designs (*)</li> </ul>	Room A (Hybrid)
	<b>Session 13C EXP. SESSION:</b>	Session Convenor	<ul style="list-style-type: none"> <li>Transdisciplinary and Participatory Research and Innovation: Philosophical Questions and Practical Challenges</li> <li>• Joost Mollen, Elisabeth Does</li> </ul>	Room C
	<b>Session 13E EXP. SESSION:</b>	Session Convenor	<ul style="list-style-type: none"> <li>Interactive Exploration of Possible Climate Actions With the En-ROADS Simulator</li> <li>• Hans Dieter Kasperidus, Inga-Maria Eichentopf</li> </ul>	Room E
	<b>Session 13F:</b> Interdisciplinary Studies of Technologies and Infrastructures	Pieter Vermaas	<ul style="list-style-type: none"> <li>• Arian Mahzouni: The Role of Electric Vehicle Batteries in Shaping Multi-System Interactions in Urban Energy Systems: A Socio-Technical Approach</li> <li>• Manuel Baumann, Marcel Weil, Jens Peters, Hüseyin Ersoy, Merve Erakca, Haruna Bismark: Constructive Technology Assessment to Support Sustainable Battery Development</li> <li>• Miriam Vetter, Sonja Haug, Karsten Weber, Caroline Dotter: Acceptance and Willingness to Use Smart Meter Applications. Results From a German Population Survey (*)</li> </ul>	Room F
	<b>Session 13G PANEL:</b>	Session Convenor	<ul style="list-style-type: none"> <li>The Multiple Languages of Engineering II</li> <li>• Andreas Brenneis, Dazhou Wang, Alexandra Kazakova, Alfred Nordmann, Peter Pelz, Viet-Anh Nguyen Duc</li> </ul>	Room G
<b>15:45 - 16:15</b>	<b>Coffee Break</b>			

16:15 - 17:05	Session 14	Keynote 3: Inclusive crash safety assessment – past, present, and future Astrid Linder	Room A (Hybrid)
17:05 - 17:30	<b>Closing, End of fPET</b>		Room A (Hybrid)

**TRACKS**

Philosophy of Engineering and Technology	
Ethics, Social Philosophy, and Political Philosophy in Engineering and Technology	
Epistemology of Engineering and Technology	
Engineering and Technology Education	
Interdisciplinary Studies of Engineering and Technology (e.g. TA, RI, VSD, STS, etc.)	
Other	

(\* ) These talks last 15 minutes (including Q&A)

## Poster Session - List of Posters

- Lee-Ryeok Han: *A Two-timed Strategy for State Identification*
- Michael Mayer, Bettina Kamm, Jan Rabold: *Approaches to Increasing Explicit Opportunities for the Acquisition of Professional Ethical Competencies in Higher Education*
- Diana Martin: *Integrative Engineering Education: Exploring the Responsibility of Technological Universities*
- Nick Treanor: *The Epistemic Role of Testing and Certification in the Construction Industry*
- Florian Richter: *From Human-System Interaction to Human-System Co-Action: Ethical Assessment of Generative AI*
- Elisabeth Does: *Ethics in Transdisciplinary Research Formats: Reflection Guidelines for Responsible Research Practice in Real-World Labs*
- Anja Bodenschatz: *Does the Implementation by Autonomous Systems Make Randomization in Ethical Dilemmas More Acceptable?*
- Maximilian Schultz: *And now we're doing such an AI project: On the State of Non-Governmental Organizations' Engagement with Artificial Intelligence - Opening a New Field of Research*
- Johannes Willem Heesbeen: *Design Practice as a Test-Bed for Institutional Logics*
- Oliver Shuey: *What can Post-Phenomenology Tell Us about Engineering Knowledge?*
- Katja Nau, Christoph Steinbach, Harald F. Krug, Dana Kuehnel, Alexis Bazzanella, Matthias Finkbeiner, Jessica S. Hoffmann, Andreas Mattern: *MANTRA - Data on Innovative Materials for Sustainability and Transfer*
- Andreas Lösch, Janine Gondolf, Christian Büscher, Ulrich Ufer: *Transformation Assessment – Observing and (Co)Shaping Sociotechnical Transformations*
- Christine Boshuijzen - van Burken, Deane Baker, Ned Dobos, Milad Ghasri, Erandi Hene Kankanamge, Twan Huybers, Oleksandra Molloy, Jo Plested, Shreyansh Singh: *Understanding Ethical Implications of AI Enabled Decision Support Systems on the Battlefield*
- Anna Jacyszyn: *AI4DiTraRe: How significant and Influential Artificial Intelligence is in the Digital Transformation of Research? A Multilevel Interdisciplinary Approach*
- Johanna Teresa Wallenborn, Maximilian Roßmann: *Myths of Sustainable AI Futures - A Multimodal Metaphor Analysis*