



25.-27.9. 2019 | Darmstadt, Germany  
[www.sps.peasec.de](http://www.sps.peasec.de)

# Programme Interdisciplinary Conference on Technical Peace and Security Research

Last update 22.9.2019

## Location

Lichtenberg Haus, TU Darmstadt  
Dieburger Straße 241, 64287 Darmstadt

## Colours

Social Event  
Single Track  
Parallel Track

## Talks

**max. 17min Presentation**  
~6min Discussion  
~2min Change  
*Thursday: 27min each in total until the next talk*  
*Friday: 25min each in total until the next talk*

## Web

[www.sps.peasec.de](http://www.sps.peasec.de)  
[https://twitter.com/peace\\_science](https://twitter.com/peace_science)

## Day 1: Wednesday, 25th of September



Start	Duration	Chair/Presenter	Organization	Topic	Track / Room
15:00	01:00	Dr. Jürgen Altmann	FONAS	FONAS-Mitgliederversammlung (just for FONAS members)	Kaminzimmer
<b>Arrival with Refreshment</b>					
16:00	02:00	Prof. Alfred Nordmann	(Moderation)	<b>Pre-Workshop: IANUS @ 30+ Anniversary</b> (open for all conference participants; in German)	Main Hall
16:00	17:00	Prof. Alfred Nordmann, Dr. René von Schomberg	IANUS	Looking Back: Prospektiv, integrativ, wertorientiert - IANUS Impulse für eine nachhaltige Friedensforschung	-
17:15	18:15	Prof. Alfred Nordmann, Dr. René von Schomberg	IANUS	Looking Ahead: Zwischen Universität und Zivilgesellschaft - ein Makerspace für friedenspolitische Technikgestaltung	-
<b>Reception with Drinks</b>					
19:00	00:45	Prof. Christian Reuter	(Moderation)	<b>Opening and Ceremonial Address</b>	Main Hall
19:00	00:10	Prof. Christian Reuter, Dr. Jürgen Altmann, Prof. Malte Götsche, Dr. Mirko Himmel	Conference Chairs	Welcome to SCIENCE PEACE SECURITY '19	-
19:05	00:05	Prof. Alfred Nordmann	IANUS	Very Short Workshop-Summary and Introduction of the Talk	-
19:10	00:30	Prof. Jürgen Scheffran	Univ. Hamburg	Ceremonial Address: The Ambivalence of Science and Technology	-
<b>Pre-Conference Dinner</b>					
22:00 End of Wednesday					

## Day 2: Thursday, 26th of September



08:00	01:00			<b>Registration and Coffee Reception</b>	
09:00	00:30	Prof. Christian Reuter	(Moderation)	<b>Opening and Introduction</b>	Main Hall
	00:20	Prof. C. Reuter, Dr. J. Altmann, Prof. M. Götsche & Dr. M. Himmel	Conference Chairs	Opening by PEASEC, FONAS, IANUS and CROSSING (The General Chair and Track Chairs of the Conference)	-
	00:05	Prof. Ralph Bruder	TU Darmstadt	Welcome at TU Darmstadt (The Vice President of Technische Universität Darmstadt)	-
	00:05	Prof. Ulrich Schneckener & Dr. Thomas Held	German Foundation for Peace Research	Welcome by Deutsche Stiftung Friedensforschung (The President of German Foundation for Peace Resarch)	-
09:30	01:00	Prof. Christian Reuter	(Moderation)	<b>Stage Setting: Central Challenges</b>	Main Hall
T1	00:27	Dr. Oliver Meier	SWP	Disarmament, Arms Control and Non-Proliferation: Developments, Challenges, Solutions	3-BioChem
T2	00:27	Dr. Paul F. Walker	Green Cross International & ISFH	Three Decades of Chemical Weapons Demilitarization: Lessons for WMD Abolition	5-Open
10:30	00:30			<b>Coffee Break</b>	Small Hall
11:00	01:20	Prof. Malte Götsche	(Moderation)	<b>The Past and the Future of Natural-Science/Technical Peace Research</b>	Main Hall
T3	00:27	Dr. Jürgen Altmann	TU Dortmund	New Military Technologies and International Security/Peace	4-NewTech
T4	00:27	Prof. Götz Neuneck	ISFH Hamburg	Future Technological and Political Arms Races – Challenges for Research and Implementation	2-Nuclear
T5	00:27	Prof. Martin Kalinowski	CTBTO, Vienna	The Work of the Comprehensive Nuclear-Test-Ban Treaty Organization	2-Nuclear
12:20	01:25			<b>Lunch Break</b>	Small Hall
13:45	01:20	Dr. Jürgen Altmann	(Moderation)	<b>New Technologies for Peace and Security</b>	Main Hall
T6	00:27	Prof. Christian Reuter	TU Darmstadt	Towards IT Peace Research: Peace and Conflict Research Challenges for Computer Science	1-Cyber
T7	00:27	Dr. Niklas Schörnig	HSFK/PRIF	Weapons Verification with High-Tech? – Chances of and Obstacles to Making Use of Emerging Technologies in Arms Control	4-NewTech
T8	00:27	Dr. Moritz Kütt & Prof. Alexander Glaser	ISFH Hamburg, Princeton Univ.	Chips, Bits & Atoms: Building Trusted Electronics for Disarmament Verification	1-Cyber
15:05	01:15			<b>Extended Break (with Coffee and Cake) and Poster Session</b>	Small+
		Prof. Christian Reuter	(Moderation)		Main Hall
				separate list of posters on next page	
16:20	01:20	Dr. Mirko Himmel	(Moderation)	<b>Misuse, Nonproliferation and</b>	Main Hall
T9	00:27	Prof. Kathryn Nixdorff	TU Darmstadt	Misuse Potential of Systems Biology – New Challenges for Biological Arms Control?	3-BioChem
T10	00:27	Dr. Jonas Siegel	Univ. Maryland	The Unintended Consequences of U.S. Nonproliferation Policies on ROK Nuclear Development	2-Nuclear
T11	00:27	Prof. Malte Götsche	RWTH Aachen	Nuclear Archaeology – Understanding Fissile Material Inventories for Nuclear Disarmament	2-Nuclear
18:00	01:30	Birgit Schmidt	(Organization)	<b>Break: Guided tour at Mathildenhöhe (optional)</b>	
19:30	03:30			<b>Conference Dinner</b>	Main+Small Hall
21:15	00:15	Prof. Alfred Nordmann, Prof. Markus Lederer, Prof. Christian Reuter	IANUS	<b>IANUS Award Ceremony</b>	Main Hall
21:30	00:10			<b>Collection of Ideas for Future Conferences</b>	Main Hall
23:00				<b>End of Thursday</b>	

## Day 2: Thursday, 26th of September



### Poster Session

15:15	01:15			<b>Extended Break (with Coffee and Cake)</b>	Main+Small Hall
15:15	01:15	Prof. Christian Reuter	(Moderation)	<b>and Poster Session</b> (Posters will be available the whole conference)	Main+Small Hall
		<b>Cyber-Security, Cyber-War and Cyber-Peace</b>			
P1		Thea Riebe & Prof. Christian Reuter	TU Darmstadt	Accessing Dual Use in IT Development	1-Cyber
P2		Marc-André Kaufhold & Prof. Christian Reuter	TU Darmstadt	Social Media Misuse: Cultural Violence, Peace and Security in Digital Networks	1-Cyber
P3		Gina Maria Schmidbauer-Wolf, Franziska Herbert & Prof. Christian Reuter	TU Darmstadt	Responsible Data Usage in Smart Cities: Privacy in Everyday Life vs. Reacting to Emergency Situations	1-Cyber
P4		Katrin Hartwig & Prof. Christian Reuter	TU Darmstadt	Fighting Misinformation on Twitter: The Plugin based approach TrustyTweet	1-Cyber
		<b>Nuclear Nonproliferation/ Disarmament</b>			
P5		Lukas Rademacher, Prof. Malte Götsche & Dr. Madalina Wittel	RWTH Aachen	Reactor Archaeology – Reconstruction of Operational Parameters from Isotope Ratios Measured in Structural Reactor Elements	2-Nuclear
P6		Dr. Moritz Kütt	ISFH Hamburg, Princeton Univ.	Technical and Legal Challenges for Germany to join the Treaty on the Prohibition of Nuclear Weapons	2-Nuclear
		<b>Biological/ Chemical Weapons</b>			
P7		Hares Sarvary & Dr. Gunnar Jeremias	ZNF Hamburg	Biological Weapons – Sources for (Mass-) Disruption?	3-BioChem
P8		Prof. Volkmar Vill, Gesine Rempp & Dr. Mirko Himmel	Univ. Hamburg	Determination of Analog Structures as Instrument for the Risk Assessment of Hazardous Chemicals	3-BioChem
P9		Jan Opper	ZNF Hamburg	Dual Use Research of Concern – Who Talks About What with Whom?	3-BioChem
P10		Dr. Mirko Himmel	ZNF Hamburg	Scientific Methods for Improving Biological and Chemical Arms Control	3-BioChem
P11		Maria Hemme	Univ. Hamburg	Toxins and the CWC – Validation of Analytical Methods for the Measurement of STX and Other PSP Toxins	3-BioChem
P12		Kolja Brockmann	SIPRI	Additive manufacturing: Increasing biological weapon proliferation risks?	3-BioChem
		<b>New Technologies and Arms Control</b>			
P13		Hubertus Sonntag & Dr. Jürgen Altmann	TU Dortmund	Comparison of Seismic Signals of Tracked Vehicles on Asphalt and Sand Road	4-NewTech
P14		Arne Sönnichsen	Univ. Duisb.Essen	Echoes of the Past? New Technologies and Securitization in the Next Phase of the Space Age	4-NewTech
P15		Stefka Schmid, Thea Riebe & Prof. Christian Reuter	TU Darmstadt	Meaningful Human Control of LAWS: A Discourse Analysis of the CCW-Debate and its Implications for Value-Sensitive Design	4-NewTech
P16		Mathias Pilch & Dr. Jürgen Altmann	TU Dortmund	Small and Very Small Armed Aircraft and Missiles - Technical Potential, Dangers and Preventive Arms Control	4-NewTech

# Day 3: Friday, 27th of September



08:00	01:00			<b>Registration</b>	Entrance+Small Hall
-------	-------	--	--	---------------------	---------------------

09:00	00:45	Dr. Mirko Himmel	(Moderation)	<b>Technology and Disarmament</b>	Main Hall
	00:15	Prof. Christian Reuter	TU Darmstadt	Welcome back!	
T12	00:30	Dr. Jonathan Forman	OPCW	Science and (Bio)Chemical Disarmament: Friends or Foes?	3-BioChem

09:45	00:15			<b>Short Coffee Break</b>	Small Hall
-------	-------	--	--	---------------------------	------------

## Parallel Sessions I:

## Morning Sessions

10:00	01:15	Prof. Christian Reuter	(Moderation)	<b>Cyber-Security, -War &amp; -Peace</b>	Main Hall
T13	00:25	Dr. Moritz Weiss & Felix Biermann	LMU Munich	Varieties of Cybersecurity? The Institutional Foundations of Protecting Critical Infrastructures	1-Cyber
T14	00:25	Dr. Matthias Schulze	SWP	Quo Vadis Cyber Arms Control? – A Sketch of an International Vulnerability Equities Process	1-Cyber
T15	00:25	Thomas Reinhold	TU Darmstadt	Counting Cyber Weapons - New Approaches to regulate and control destructive Cyber Tools	1-Cyber

10:00	01:15	Dr. Mirko Himmel	(Moderation)	<b>Biological/Chemical Weapons</b>	Small Hall
T16	00:25	Dr. Mirko Himmel	ZNF Hamburg	Recent Developments in Biological and Chemical Arms Control	3-BioChem
T17	00:25	Dr. Una Jakob	ISFK/PRIF	Addressing Biotechnological Developments in the BWC Framework: Experiences and Options	3-BioChem
T18	00:25	Dr. Johannes Frieß	BOKU Vienna	Gene Drive – Technology with Dual-Use Potential?	3-BioChem

11:15	00:30			<b>Coffee Break</b>	Small Hall
-------	-------	--	--	---------------------	------------

## Parallel Sessions II:

## Midday Sessions

11:45	00:50	Thomas Reinhold	(Moderation)	<b>Arms Control in Outer- &amp; Cyber-Space</b>	Main Hall
T19	00:25	Arne Sönnichsen & Dr. Daniel Lambach	Univ. Duisb.Essen	A Developing Arms Race in Outer Space? Deconstructing the Dynamics in the Field of Anti-Satellite Weapons	4-NewTech
T20	00:25	Thea Riebe, Marc-André Kaufhold, Tarun Kumar, Thomas Reinhold, Prof. Christian Reuter	TU Darmstadt	Design of a Threat Intelligence Application for Cyber Attribution	1-Cyber

11:45	00:50	Prof. Malte Göttsche	(Moderation)	<b>Peace, Safety and Security</b>	Small Hall
T21	00:25	Prof. Alfred Nordmann	TU Darmstadt	Engaging the Stewardship Race: How does Peace enter in?	5-Open
T22	00:25	Prof. Jürgen Scheffran	Univ. Hamburg	Civil-Military Interactions, Dual-Use and Preventive Arms Control in Science and Technology	5-Open

12:35	01:25			<b>Lunch Break</b>	Small Hall
-------	-------	--	--	--------------------	------------

## Parallel Sessions III:

## Afternoon Sessions

14:00	01:15	Prof. Markus Lederer	(Moderation)	<b>Nuclear Nonproliferation &amp; Disarmament</b>	Main Hall
T23	00:25	Antonio Figueroa, Prof. Malte Göttsche	RWTH Aachen	Nuclear Archaeology: Reconstructing Reactor Histories From Reprocessing Waste	2-Nuclear
T24	00:25	Dr. Matthias Englert	Öko Institute	Fissile Materials, Nuclear Proliferation and HEU Elimination	2-Nuclear
T25	00:25	Dr. Madalina Wittel & Prof. Malte Göttsche	RWTH Aachen	Prospects for Spent Nuclear Fuel Safeguarding with Antineutrino Detectors	2-Nuclear

14:00	01:15	Dr. Jürgen Altmann	(Moderation)	<b>New Technologies and Arms Control</b>	Small Hall
T26	00:25	Dr. Grant Christopher	VERTIC	Additive Manufacturing and the Military: Applications and Implications	4-NewTech
T27	00:25	Maaike Verbruggen	Univ. Brussel	Me, Myself and the Swarm – an Assessment of the Challenges to Establishing Meaningful Human Control over Swarms	4-NewTech
T28	00:25	Prof. Hartwig Spitzer	Univ. Hamburg	Cooperative Transparency – Modernization of Open Skies Sensors in Tense Times	4-NewTech

15:15	00:30	Prof. Christian Reuter	(Moderation)	<b>Future Peace Workshop</b>	Main Hall
	00:10	Prof. Christian Reuter, Prof. Malte Göttsche & Dr. Thomas Held	TU Darmstadt, RWTH Aachen, DSF	Announcement of SCIENCE PEACE SECURITY '21	
	00:20	Prof. Christian Reuter	TU Darmstadt	Outlook and Future Discussions	

15:45	00:45			<b>Farewell (with Coffee and Cake)</b>	Small Hall
-------	-------	--	--	--	------------

16:30				<b>End of the Conference</b>	
-------	--	--	--	------------------------------	--