



## Outer Space, New Tech and Future Space Settlement: Human Rights for the Final Frontier: Virtual Conference

Time	Programme Outline	
9:00–9:15	<p><b>Welcome, Karakia and Opening Remarks</b> Dr Anna Marie Brennan, <i>University of Waikato</i></p> <p><b>View on Stream A: Access Link <a href="#">Here</a></b></p>	
9:15-10:00	<p><b>Keynote Address</b> Professor Melissa de Zwart, <i>University of Adelaide</i></p> <p><b>View on Stream A: Access Link <a href="#">Here</a></b></p>	
	<p><b>View on Stream A: Access Link <a href="#">Here</a></b></p>	<p><b>View on Stream B: Access Link <a href="#">Here</a></b></p>
10:00-11:00	<p><b>Panel 1: General Development of Human Rights in Outer Space</b></p>	<p><b>Panel 2: Food, Space Missions and Biotechnology in Outer Space: Critiquing a Human Rights-Based Approach</b></p>
	<p><i>Chair: Dr Anna Marie Brennan, University of Waikato</i></p> <ol style="list-style-type: none"><li>1. Protection of Human Rights in Space: Legal and Geopolitical Considerations</li></ol>	<p><i>Chair: Janneke Parrish, University of Waikato</i></p> <ol style="list-style-type: none"><li>1. Gene Technology and Plant Growth in Outer Space for Astronaut Nutrition – To What Extent Must Cultural Acceptability be Considered to Fulfil the Adequacy Criteria of the Right to Food?</li></ol>

	<p><i>Prof. (Dr.) Sandeepa Bhat, National University of Juridical Sciences</i></p> <p>2. Justice in Space: quo vadis, Conflict of Laws? <i>Dr Stefano Dominelli, University of Genoa</i></p> <p>3. Human Rights in Outer Space: Lessons from Human Rights Enforcement on the High Seas <i>Nicole Santiago and Peggy McGregor, Trilateral Research Ireland and the French Ministry of the Armed Forces</i></p> <p>4. The Inner Alien in our Outer Space: The Organisation of Space Settlements <i>Mukesh Chiman Bhatt, School of Law, Birkbeck College, University of London, UK</i></p>	<p><i>Dr Ciara Finnegan, University of Adelaide</i></p> <p>2. The Human Right to a Future: Biotechnology and Species Survival in Space Law <i>Chelsea Franck, University of Waikato</i></p> <p>3. A Human Rights-Based Approach to Food Sustainability in Outer Space <i>Jonathan Lim, founder of Jus Ad Astra</i></p> <p>4. Reinterpreting the Rescue Agreement: Towards a New Human Rights-Based Framework for Future Space Missions involving Emerging Technologies <i>Dr Anne-Sophie Martin, Sapienza University of Rome</i></p>
11:00-11:15	<b>MORNING TEA BREAK</b>	
	<b>View on Stream A: Access Link <a href="#">Here</a></b>	<b>View on Stream B: Access Link <a href="#">Here</a></b>
11:15-12:15	<b>Panel 3: AI and Human Rights Governance in Outer Space</b>	<b>Panel 4: Outer Space, Human Rights and the Environment</b>
	<p><i>Chair: Dr Ioana Bratu, Vrije Universiteit Amsterdam and Founder of the AI and Space Law Society</i></p> <p>1. Orbital AI Governance: Accountability Gaps and Human Control of Autonomous Space Systems <i>Jonathan Iwry, University of Pennsylvania</i></p> <p>2. Legal and Policy Challenges of New Technology including Artificial Intelligence (AI) for Human Rights Protection in the New Space Economy <i>Helen Tung, University of Huddersfield</i></p> <p>3. Remote Sensing and Humanitarian Relief During Disasters: Minding the Human Rights Gaps in the Age of AI</p>	<p><i>Chair: Dr AJ Link, Howard University</i></p> <p>1. Red vs Green Mars: Use as the Province of All Mankind versus the Rights of Martian Nature <i>Dr Thomas Cheney, Northumbria University</i></p> <p>2. Embedding Human Rights in Outer Space Governance and Practice: Securing Buy-In for Sustainable Futures <i>Jez Turner and Dr Juliana Rinaldi-Semione, University of Nottingham</i></p> <p>3. The Right to a Healthy Environment on Earth and Beyond: Ecuador's Constitutional Approach to Space Law and the Protection of Nature</p>

	<p><i>Anna Marie Brennan, University of Waikato</i></p> <p>4. Envoys or Combatants? Rethinking Astronaut Status in Times of Conflict <i>Raoul Cardellini Leipertz, Centre for Higher Defence Studies in Rome</i></p>	<p><i>Diego Mauricio Álvarez Mejía, Niubox Legal   Digital in Ecuador, Vice President of the Ecuadorian Space Society, and Director of the Ecuadorian Chamber of Innovation and Technology (CITEC)</i></p> <p>4. Islamic Issues Involved in Space Travel: A Human Rights Lens <i>Hyder Gulam, independent researcher</i></p>
12:15-13:15	<b>Panel 5: Orbital Congestion and Rights Beyond Earth</b>	<b>Panel 6: Labour Rights and Justice in Outer Space Governance</b>
	<p><i>Chair: Jonathan Lim, Founder of Jus Ad Astra</i></p> <p>1. Orbital Congestion Through the Alternative Lens of Environmental and Criminal Jurisprudence in Outer Space <i>Nirbindu Banerjee, The West Bengal National University of Juridical Sciences</i></p> <p>2. Investment Law, Reconsidered: Human-Rights-Based Property Protection for Mega-Constellation Operators <i>Mario Nocerino, University of Naples Federico II</i></p> <p>3. From Homo Sapiens to Homo Spatiens? Rethinking the Human Subject of Rights Beyond Earth <i>Nivedita S, National University of Singapore</i></p> <p>4. Constellations of Duty: Conditioning Space Licenses on Human-Rights Due Diligence and the Right to Science <i>Edward Koellner, Principal of Oort Ventures</i></p>	<p><i>Chair: Dr Anne-Sophie Martin, Sapienza University of Rome</i></p> <p>1. Working Across the Stars: Private International Law Aspects <i>Dr Filippo Marchetti, University of Westminster</i></p> <p>2. Human Rights Without <i>Terra Firma</i>: Legal Philosophies and Enforcement at the Final Frontier <i>Dr. Vivek V. Nemane and Mr. Mahesh Sharma, Symbiosis Law School</i></p> <p>3. The Human Right to Dark Skies: Cultural Preservation, Scientific Inquiry, and Justice in Outer Space Governance <i>Shrawani Shagun, independent scholar</i></p> <p>4. CSR as a Mechanism of Protecting Human Life in the Ultrahazardous Space Environment <i>Dr. Maria Manoli, School of Law, University of Aberdeen</i></p>
13:15-14:00	<b>LUNCH BREAK</b>	
	<b>View on Stream A: Access Link <a href="#">Here</a></b>	<b>View on Stream B: Access Link <a href="#">Here</a></b>
14:00-15:00		

	<p style="text-align: center;"><b>Panel 7: Future Settlements and Realising Human Rights</b></p>	<p style="text-align: center;"><b>Panel 8: Armed Conflict and Disputes in Outer Space: A Human Rights Lens</b></p>
	<p><i>Chair: Chelsea Franck, University of Waikato</i></p> <ol style="list-style-type: none"> <li>1. Human Rights in Space Settlements - An Analysis of the Application of Relevant Customary International Law and of National Laws <i>Francesca Giannoni-Crystal, founding member of Crystal &amp; Giannoni-Crystal LLC</i></li> <li>2. Space Law and Human Rights – Regulating Corporate Duty in Extraterrestrial Settlements <i>Dr E Prema and Ragul OV, Vellore Institute of Technology</i></li> <li>3. Interplanetary Law and the Right to Self-Determination <i>Dr AJ Link, Howard University</i></li> </ol>	<p><i>Chair: Dr Ciara Finnegan, University of Adelaide</i></p> <ol style="list-style-type: none"> <li>1. Beyond Targetability: Liability and Human Rights in the Militarisation of Space <i>Alexandros E. Farsaris, General Directorate of National Defence Policy and International Relations in the Hellenic Ministry of Defence</i></li> <li>2. In Space, Can the Other Side Be Heard? <i>Dr Alexander Simmonds, University of Dundee</i></li> <li>3. A Copernican Shift for Space Law: Redefining Outer Space for Self-Determination <i>Matthew Leathers, Victoria University of Wellington</i></li> </ol>
15:00-16:00	<p style="text-align: center;"><b>Panel 9: Corporate Human Rights Due Diligence and Outer Space</b></p>	
	<p><i>Chair: Dr Anna Marie Brennan, University of Waikato</i></p> <ol style="list-style-type: none"> <li>1. International and European Approaches to Human Rights Protection in the Space Sector: Prospects for the Future <i>Dr Zuzanna Kulińska-Kępa, University of Warsaw</i></li> <li>2. The Words Unsaid – An Analysis of the ADR-IOE Economy <i>Janneke Parrish, University of Waikato</i></li> </ol>	

	<p>3. High-Speed Dreams in the Outer Space, Grounded by Inequality: Starlink and the Privatization of a Human Right <i>Dr. Ilona Schembri, University of Malta</i></p> <p>4. Space Business and the Individual: Embracing Natural Law and Property for Human Rights in Outer Space Commerce <i>Scott Schneider, International Aerospace Law &amp; Policy Group</i></p>	
16:00-17:00	<p style="text-align: center;"><b>View on Stream A: Access Link <a href="#">Here</a></b></p> <p style="text-align: center;"><b>Keynote Address</b> Emeritus Professor Steven Freeland, <i>Western Sydney University</i></p> <p style="text-align: center;"><b><i>Cut from the Same Cloth? The Relationship Between International Human Rights Law and International Space Law'</i></b></p> <p><i>The post-Second World War period saw the conclusion of a number of significant legal instruments that codify the fundamental rights and freedoms that underpin international human rights law. The human rights 'twin covenants' were negotiated at the same time that the 'space race' began and the most important rules of space law were developing. Yet, these two significant evolutionary law-making processes were conducted largely in isolation from each other and, as a result, the intersection between international human rights principles and outer space has largely been ignored. This talk will discuss ways in which the use and exploration of outer space should be considered from a human rights perspective.</i></p>	
17:00-17:15	<p style="text-align: center;"><b>View on Stream A: Access Link <a href="#">Here</a></b></p> <p style="text-align: center;"><b>Thank You and Farewell</b> Dr Anna Marie Brennan, <i>University of Waikato</i></p>	