

Highlights of the 2nd IEEE Conference on Telepresence

Jan van Erp, Gwenn Englebienne, Tiago H. Falk



The IEEE Conference on Telepresence (TELEPRESENCE 2025) – the second edition of the flagship conference of the IEEE Future Directions Initiative on Telepresence – was held from September 8-10, 2025. TELEPRESENCE 2025 was an in-person event located at Stadsgehoorzaal, in Leiden, The Netherlands.

The conference was a huge hit and attracted 87 people physically to the Netherlands. One poster was presented remotely to solve unexpected travel difficulties. It provided a stimulating forum for educators, researchers, and practitioners to learn, share knowledge, report recent innovations and developments, and exchange ideas and advances in all aspects of telepresence systems and applications, telerobotics, human-machine interfaces, and autonomy.

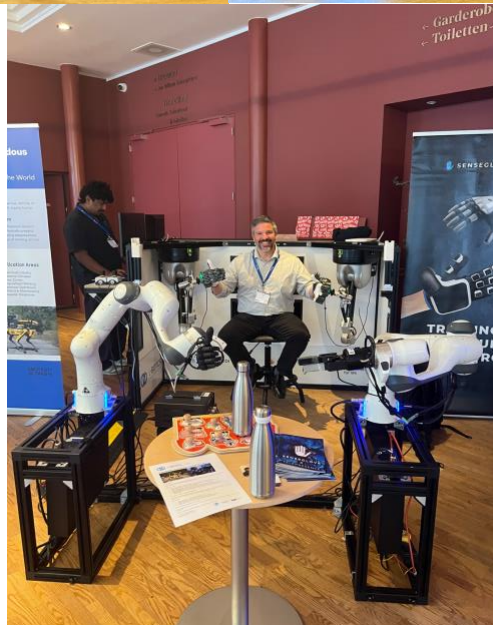


The Telepresence 2025 Conference featured the presentation of 43 peer-reviewed regular and short papers (appearing in IEEE Xplore), three abstracts which were presented as posters, eight scientific demonstrations, and five industrial exhibitions.

All 43 technical contributions were presented at the conference across five oral sessions and three poster sessions, as well as three special/industry sessions and two demo sessions, organized around the following themes:

- Session 1 – Embodiment
- Session 2 – Dexterity
- Session 3 – Safety and Dexterity
- Session 4 – Humans, Health and Haptics
- Session 5 – Immersive Haptics
- Special Session 1 – Haptic Glove Design
- Special Session 2 – Safety in Telepresence
- Special Session 3 – Future considerations in Telepresence
- Poster Session 1
- Poster Session 2
- Poster Session 3
- Demo Session 1
- Demo Session 2

The conference was preceded by a touristic tour of the city of Leiden, which introduced the attendees to the city and each other.



Two Best Paper Awards were also handed out. Congratulations to the following winners:

Best Paper Award Winner: Praminda Caleb-Solly, Kirsty Brown, Richard Solly, Karen Lloyd, *Trialling telepresence robots as part of a volunteer support scheme to encourage social interaction and physical activity*

Best Student Paper Award Winner: Ryan Yeung, David Black, Boyan Chen, Victoria Lessoway, Janice Reid, Sergio Rangel-Suarez, Silvia Chang, Septimiu E. Salcudean, *Mixed Reality Tele-Ultrasound over 750 km: A Feasibility Study*



In addition to the technical program, TELEPRESENCE 2025 also featured two invited/keynote speakers addressing emerging trends in telepresence:

- Serena Ivaldi (INRIA, France)
- Darwin G. Caldwell (IIT, Italy)

One invited keynote speaker, Thomas B. Sheridan (Emeritus Professor, MIT, USA), was unfortunately forced to cancel at the last minute due to health concerns.



A snapshot of the programme can be found below:

	Monday Sept. 8	Tuesday Sept. 9	Wednesday Sept. 10		
9.00 - 9.30	Opening	Paper session 2: Dexterity	Paper session 4: Humans, Health and Haptics		
9.30 - 10.00	Paper session 1: Embodiment				
10.00 - 10.30					
10.30 - 11.00	Break	Break	Break		
11.00 - 11.30	Keynote: Serena Ivaldi	Paper session 3: Safety and dexterity	Keynote: Darwin G. Caldwell		
11.30 - 12.00					
12.00 - 12.30	Lunch	Lunch	Lunch		
12.30 - 13.00					
13.00 - 13.30	Special session 1: Design your own haptic glove for telepresence	Special session 2: Safety in Telepresence	Special session 3		
13.30 - 14.00					
14.00 - 14.30	ESTEC lab Tour	Keynote: Thomas. B. Sheridan	Poster session 3	Demo session 3	
14.30 - 15.00		Break	Break		
15.00 - 15.30					
15.30 - 16.00					Poster session 1
16.00 - 16.30		Poster session 2	Closing		
16.30 - 17.00					
17.00 - 17.30	Opening reception	Poster session 2			
17.30 - 18.00					
18.00 - 19.00		Conference dinner & science museum			
19.00 - 20.00					
20.00 - 21.00					
21.00 - 22.00					

In addition to the technical programme, the conference also included a tour of the Leiden ESA-ESTEC facilities with inspiring demos of, and discussions about, interplanetary telepresence systems. The opening reception included invited speakers and highlighted the IEEE Brain Technical Community 2.0 and the RAS TC on Telerobotics, while the banquet at Leiden's science Museum "Boerhave" fostered a vivid community of researchers.





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