

Mini-symposium on Haptic Human-Robot Interaction

1 May 2018 - Aula Conference Centre - Delft University of Technology

This 1-day symposium covers physical collaboration between humans and robots in practice and research. It also shows how we can transfer knowledge from one domain to another. During lunch (not provided), there will be four demonstrators in which you can experience real human-robot interaction. The symposium is given prior to a PhD defence.

The symposium is aimed at undergraduate students, master students, PhD students, postdocs, researchers from universities/organisations and those interested in the latest developments in this field.

To freely attend the symposium, please register at: j.vanoosterhout@tudelft.nl

Location

Commissiekamer 3 - Aula Conference Centre - Delft University of Technology

Program

09:30-09:35	Opening
09:35-10:15	Presentation 1 "From remote maintenance on fusion plants to remote healthcare" by dr.ir Cock Heemskerk (Heemskerk Innovative Technology)
10:15-11:45	presentation 2 "Human robot interaction in manual product assembly" by dr.ir Wietse van Dijk (TNO)
10:45-11:00	Break
11:00-12:00	Presentation 3: "Presentation on his research on human-machine interaction" by prof.dr. Cagatay Basdogan (KOC University, Turkey)
12:00-13:30	Demonstrations (No lunch provided) <ul style="list-style-type: none">▪ HiT: Training operators for tele-manipulation: operation Jenga [1]▪ PhD: Co-operation and haptic assistance for two asymmetric slaves [2]▪ Delft Haptics Lab: 3DOF planar teleoperation with different (assistive) controller settings▪ Haption: Optimization of human-robot collaboration by interactive simulation with force-feedback [3].
14:30-17:30	PhD defence: "Co-operation and Haptic Assistance for Tele-manipulated Control over Two Asymmetric Slaves" by ir. Jeroen van Oosterhout [2,4]
14:30	lekenpraatje
15:00	Defence
16:30	Reception

Organizers

Ir. Jeroen van Oosterhout

Prof.dr.ir. David Abbink

<http://www.delfthapticslab.nl/>



[1] - Jenga simulation, https://www.youtube.com/watch?v=SMA_hJfegxs

[2] - Co-operation and haptic assistance, <https://www.youtube.com/watch?v=Sm9Ak9Y9mJY>

[3] - Dombrowski, 2017, "Interactive Simulation of Human-robot Collaboration Using a Force Feedback Device".
<https://doi.org/10.1016/j.promfg.2017.07.210>

[4] - van Oosterhout, J., 2018, "Co-operation and Haptic Assistance for Tele-manipulated Control over Two Asymmetric Slaves".
<http://doi.org/10.4233/uuid:50600d87-4a1b-47d5-a26b-2b5ca645ad8b%20>