Scientific Chair:

Research Consortium E-BRAiN — Evidence-Based Robot-Assistance in Neurorehabilitation (co-ordinator Professor Dr. med. Thomas Platz. Greifswald)

www.ebrain-science.de

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Hochschule Neubrandenburg





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The international Symposium brings clinicians and scientists together to share their reasoning, research results, and insights.

Lessons learnt from brain science approaches, aspects of therapeutic interaction, the role of motivation, the design of social robots, including gender aspects, user model technology, design of communication, digitally monitoring training behaviour, patient preferences and ethical considerations with regard to future technology, as well as clinical experience with systems that have been developed so far are all addressed.



Alfried Krupp Wissenschaftskolleg Greifswald



Use of Humanoid Robot Technology for Therapy

Alfried Krupp Wissenschaftskolleg Greifswald Martin-Luther-Straße 14 17489 Greifswald info@wiko-greifswald.de www.wiko-greifswald.de

International Symposium 18th - 21st May 2022

Wednesday, 18th May 2022

4.00 pm – 6.00 pm Registration

6.00 pm

Public Lecture

Humanoid robots in rehabilitation therapy — chance and challenge

Thomas Platz (Greifswald)

Moderation: Karlhans Endlich (Greifswald)

afterwards: Evening Reception

Thursday, 19th May 2022

9.00 am - 11.00 am

Therapeutic interaction & Robot therapy

Stephanie Bobe (Greifswald)

Philipp Deutsch (Greifswald)

Carolin Goldmann (Greifswald)

Ann-Sophie Hensler (Konstanz)

Ann Pedersen (Greifswald)

Thomas Platz (Greifswald)

11.00 am – 11.30 am *Coffee Break*

11.30 am - 12.30 pm

Widening the lens: Cognitive and brain science approaches for research on human-robot interactions

Emily S. Cross (Sydney)

12.30 pm – 2.00 pm *Lunch Break*

2.00 pm - 3.00 pm

Lessons learned from upper-limb post-stroke rehabilitation with a social robot

Shelly Levy-Tzedek (Beer Sheva)

3.00 pm - 4.00 pm

Social Robotics: Designing Machines that Interact with People

Arvid Kappas (Bremen)

4.00 pm – 4.30 pm Coffee Break

4.30 pm – 5.30 pm

Motivation

Alfons Hamm (Greifswald) Christoph Szeska (Greifswald)

Friday, 20th May 2022

9.00 am - 10.00 am

User Model Technology

Peter Forbrig (Rostock)

Alexandru Bundea (Rostock)

10.00 am - 11.00 am

Towards We-intentional HRI Interactions using Theory of Mind and Hierarchical Task Network

Maitreyee Maitreyee (Umea)

11.00 am – 11.30 am *Coffee Break*

11.30 am - 12.30 pm

Building Feminist Social Robots: What, Why and How

Katie Winkle (Stockholm)

12.30 pm – 2.00 pm *Lunch Break*

2.00 pm - 3.00 pm

Are humanoid robots capable of social interactions with humans and can they be held morally responsible?

Raul Hakli (Helsinki)

3.00 pm - 4.00 pm

Intuitive and informative Human-Robot Communication

Serge Autexier (Bremen)

4.00 pm – 4.30 pm Coffee Break

4.30 pm – 5.30 pm Human Behavior Recognition and Natural Language Generation for Neuro-Rehabilitation

Thomas Kirste (Rostock)
Sebastian Bader (Rostock)

Saturday, 21st May 2022

9.00 am - 10.00 am

Health Preference Research — Development, Methods and Contributions to Health Care Decision Making Peter Zweifel (Zürich)

Teter Zwener (Zuner

10.00 am - 11.00 am

Patient preferences in neurorehabilitation: a consideration of clinical effects and technical features of robotic therapy

Christin Juhnke (Neubrandenburg)
Ann-Kathrin Fischer (Neubrandenburg)
Gina-Sophie Labahn (Neubrandenburg)
Axel C. Mühlbacher (Neubrandenburg)

11.00 am – 11.30 am

11.30 am - 12.30 pm

Efficiency frontier of digital health interventions: A probabilistic model of cost-effectiveness analysis

Andrew Sadler (Neubrandenburg) Yvonne Stefanie Jordan (Neubrandenburg) Axel C. Mühlbacher (Neubrandenburg)