### 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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### Anmeldung:

www.t1p.de/E-Brain2022











Hochschule Neubrandenburg University of Applied Sciences







EUROPÄISCHE UNION Europäischer Sozialfonds

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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 18<sup>th</sup> – 21<sup>st</sup> 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 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

Lessions 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 2020

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

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

Monitoring Behaviour / NLG / Model-based robot behaviour

Thomas Kirste (Rostock) Sebastian Bader (Rostock) Timon Felske (Rostock) Dipendra Yadav (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)

10.00 am - 11.00 am

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

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

11.00 am – 11.30 am *Coffee Break* 

11.30 am – 12.30 pm

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

Axel C. Mühlbacher (Neubrandenburg) Andrew Sadler (Neubrandenburg)