

12:40 Workshop start
12:40-12:45 Brief Introduction, announcements, Florentin Wörgötter

Embodied sensorimotor interaction

12:45-13:15 Embodied auditory localization: the Lizard ear, Danish Shaikh
13:15-13:45 Flora-robotica: plant-robot hybrid collective organisms, Kasper Støy
13:45-14:15 Behaviour organisation and learning with Dynamic Neural Fields: towards neuromorphic cognitive robots, Yulia Sandamirskaya

Locomotion

14:15-14:45 Muscular-Skeletal Biped Robots for Understanding Morphological Functions of Human Body Structure, Koh Hosoda
14:45-15:15 Legged robot and neuromusculoskeletal model for revealing adaptation mechanism in split-belt treadmill walking, Shinya Aoi
15:15-15:45 Insect gait mechanism through neuromechanical interaction: A modeling study, Yuichi Ambe
15:45-16:00 Coffee break
16:00-16:30 Neural dynamics and synaptic plasticity in a recurrent neural network for complex autonomous behaviors of a biomechanical walking robot, Poramate Manoonpong

Collective behavior

16:30-17:00 Mixed Reality Experimentation for Multirobot Systems, Nora Ayanian
17:00-17:30 Control without Control(ers): How Robots can Learn to Behave with Memory, Florentin Wörgötter

Spotlight 3-5 min talks

17:30-18:10

- Self-Adaptive Recurrent Neural Networks for Robust Spatiotemporal Processing: from Animals to Robots, Sakyasingha Dasgupta
- TEGOTAE-based decentralized control mechanism underlying myriapod locomotion, Kotaro Yasui

- Design of a Modular Quadruped Robot for Empirically Exploring the Effects of Morphology on the Emergence of Gaits, Mamani Jerome
- Investigation of the Effect of Body Flexibility on Bounding Gait with a Simple Model, Tomoya Kamimura
- Analysis of flock guidance based on the vector field representation, Yuto Sato
- Pheeno, A Versatile Swarm Robotic Research and Education Platform, Sean Wilson
- Collective Sharing of Network Energy and Packet-Relay Task in Wireless Multi-hop Infrastructure, Rui Teng

18:10-18:30

Discussion & closing