Building Brains for Robots?

Natural Intelligence versus Artificial Intelligence

20th December
Villa Giustiniani Cambiaso
Via Montallegro 1, Genova

h 10.00
Admission and Welcome Coffee

h 11.00
Prof. Ilaria Delponte Chair
**Prof. Fulvio Mastrogiovanni Introduction**

h 11.30
Prof Rüdiger Dillmann Lecture
"Understand, model and translate biologic neural principles towards robot control systems. In comparison to conventional computing the brain is superior in terms of energy efficiency, robustness and adaptivity. Thus, we investigate into modeling biologic processes enabling the brain to perform sensomotoric computation and finally to implement it in silicon in form of biomorphic hardware. We focus on brain like senso-motor control principles which are data driven in contrast to model driven AI algorithms. Spiking neural networks have the potential on replicating real neurons representing parts of their biological characteristics. The brain-inspired computational approach can be extended towards SNN based navigation and mapping forming episodic spatial neural memories with multi-scale learning capabilities."

h13.30
Conclusions and Christmas greetings
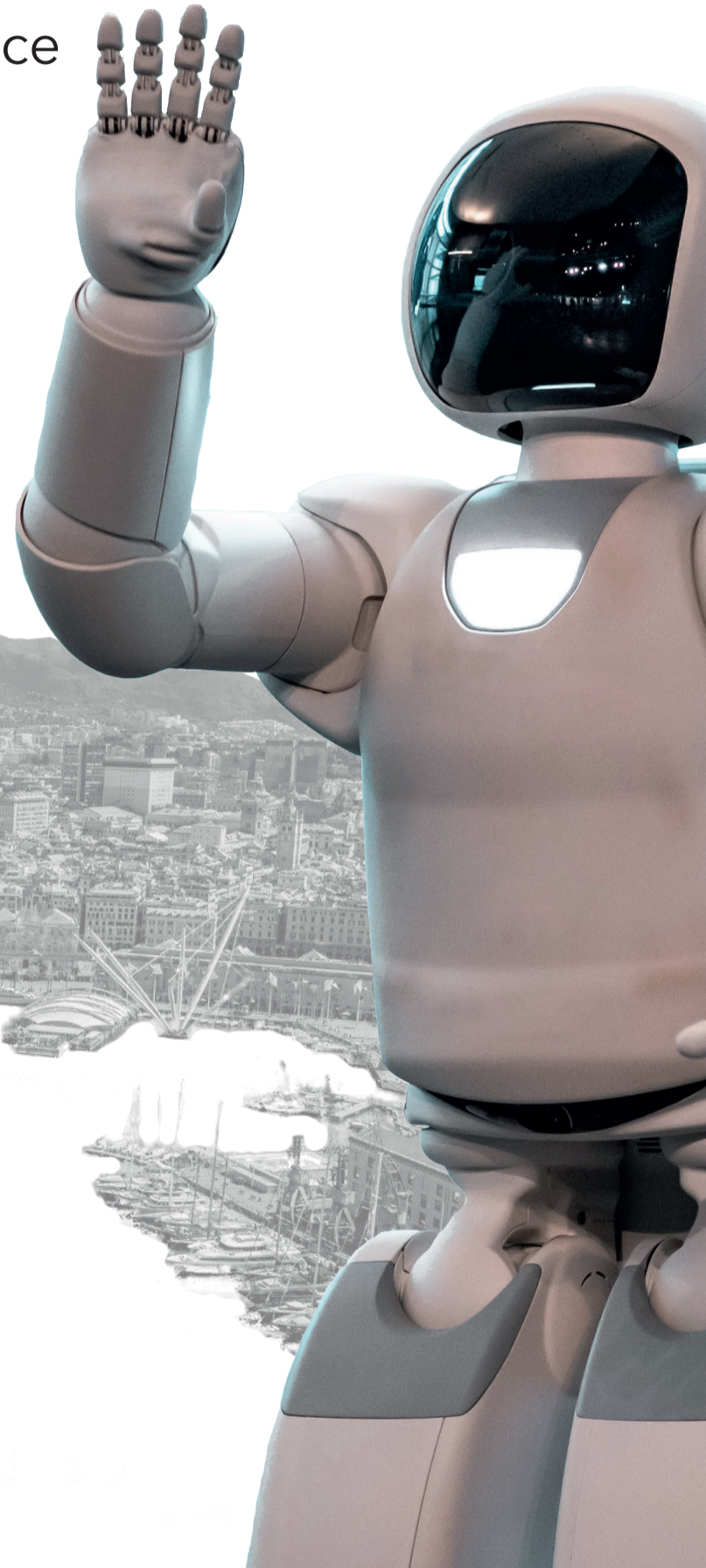
SIGN UP
YOUR PARTECIPATION

Prof. Rüdiger Dillmann

He founded the **Institute of Anthropomatics and Robotics** at the Karlsruhe Institute of Technology. He was **Coordinator of the German Collaborative Research Center "Humanoid Robots"** and several large scale European IPs. He is **Editor in Chief** of the book series **COSMOS**, Springer. Since 2018 he is Professor emeritus. He is now **research director at FZI** and is consulting start up companies and SMEs of his former PhD students.

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