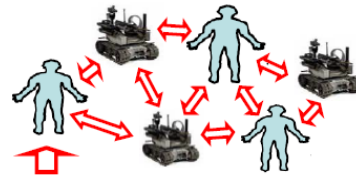## IS-5 Towards Unified Human-Robotic Societies

Peter Sapaty (Academy of Sciences, Ukraine), Masanori Sugisaka (ALife Robotics, Japan)
Takao Ito (Hiroshima University, Japan)

Large numbers of robotic facilities are accumulated worldwide, but existing robots still remain specialized devices rather than intelligent collaborators for humans. To efficiently integrate massive robotics into human societies, more general and universal approaches are needed. The presentation will reveal higher-level, semantic, model supported by Spatial Grasp Language (SGL) in which top operations and decisions in distributed spaces are expressed in extremely compact form, with traditional system management shifted to automatic SGL interpretation. Communicating SGL interpreters associated with humans and robots allow us to organize goal driven teams up to entire societies operating under unified control. Presentation will exhibit numerous scenarios in SGL from most critical applications.

Holistic Spatial Scenario