UNIVERSITÉ DE LORRAINE

4ᵗʰ **Workshop on Service Orientation in Holonic and Multi-Agent Manufacturing**

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Université de Valenciennes et du Hainaut-Cambrésis

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LMPo

Session title: **Holonic and agent-based industrial automation systems -** **HAIA**

Organisers:

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Short presentation: Holonic and agent-based systems have been widely studied in the context of industrial systems, aiming to design more reactive, reconfigurable, adaptive and self-organized systems. One key issue in implementing such approaches is related to the automation level that must evolve to integrate these concepts in a more natural way. This special session intends to bridge the gap between holonic and multi-agent control (architectural considerations) on one side and the automation level (technological considerations) on the other side, including formal methodologies, development tools, benchmarking and deployment methods.

Topics are (but not limited to):

- Holonic and multi-agent architectures,

- Evolution of automation in the context of holonic and multi-agent control,

- Industrial implementation of holonic and multi-agent architectures,

- Technological solutions for industrialization of holonic and multi-agent models,

- Benchmarking and validating holonic and multi-agent architectures,

- Impact of holonic and multi-agent architecture on the automation of the future,

- Cyber-physical systems and industrial automation,

- Deploying methods of holonic and multi-agent control architectures in industry,

- Adaptive, robust and reconfigurable automation,

- Automation of the future,

- Service-orientation and emerging technologies for holonic/multi-agent systems,

- Real-case studies.

Keywords: holonic systems, multi-agent systems, industrial automation

Important dates:

- Full Paper Submission: May 22, 2014
- Notification of Acceptance: June 22, 2014
- Final Paper Submission: September 8, 2014