

# ARTEMIS Industry Association

Hall 2

Transform platform

Booth T8



# NETWORKING SESSIONS

ARTEMIS-IA co-organises the following three sessions:

*Tuesday 20 October – 16:00-16:45 - Room 5B*

## THE RELEVANCE OF LARGE-SCALE PILOT PROJECTS ON EMBEDDED DIGITAL TECHNOLOGY

ARTEMIS will present 3 large scale Innovation Pilot Projects (AIPP): Crystal, EMC<sup>2</sup> and Arrowhead. These 3 frontrunners started under the ARTEMIS-JU program and accomplished outstanding results that cannot be achieved by groups of smaller projects in the Embedded Digital Technology domain.

*Wednesday 21 October- 14:50-15:35 - Room 5B*

## CYBER-PHYSICAL BIG DATA SYSTEMS: COMING TOGETHER OF GAME-CHANGING TRENDS

The session explores future opportunities, challenges and obstacles for Cyber-Physical Big Data Systems. It will incorporate the view of three major complementary IT disciplines:

1. Embedded and Cyber-Physical Systems (ARTEMIS-IA),
2. Big Data (BDV Association),
3. Software, services and cloud (NESSI ETP).

*Wednesday 21 October – 16:50-17:35 -Room 5A*

## IOT AUTOMATION FOR PRODUCTION

This session focusses on production automation and the move towards Industrial IoT and Industrial System of Systems, and their usage and impact on automation in the production industry. It follows up on the issues Commissioner Oettinger addressed in his speech at the Hannover Messe in April 2015.

# PROJECT SUMMARIES

ARTEMIS-IA brings the following projects:

ARTEMIS Industry Association proudly presents the three ARTEMIS Innovation Pilot Projects (AIPP) from the ARTEMIS-JU legacy, together with a robotics project. When you visit our stand and see the presentations and demos, you will be surprised by the solutions that our projects will provide for day-to-day life.

### AIPP: ARROWHEAD (STAND T9)

*Service Interoperability enabling collaborative automation*



ARROWHEAD will provide a technical framework, including solutions for integrating legacy systems, to implement and evaluate cooperative automation through real application pilots in electro-mobility, smart buildings, infrastructures and cities, industrial production, energy production and the “virtual energy” market, leading the way to further standardisation and showcasing the actual impact in real life.

### AIPP: CRYSTAL (STAND T8)

*Critical sYSTem engineering AcceLeration*



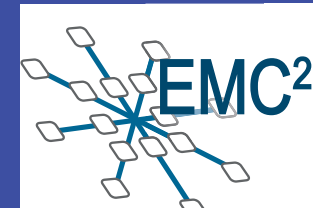
CRYSTAL will establish workflows based on current and emerging technologies and enable their use in the engineering environment of relevant industrial domains, to reduce system design costs through the improvement and smart integration of system analysis, safety analysis and system exploration tools, as well as reduce development cycles by developing reusable technological bricks in alignment with the IOS and RTP.

### AIPP

*The ARTEMIS Innovation Pilot Projects (AIPPs) are built upon results from existing projects, to provide market driven solutions through prototypes & demo's, foster interoperability and synergies between various environments, to keep leadership position in traditional markets and gain worldwide positions, including more markets in new areas.*

### AIPP: EMC<sup>2</sup> (STAND T8)

*Embedded Multi-Core systems for Mixed Criticality applications in dynamic and changeable real-time environments*



Embedded Systems enhance mechatronic products with cheaper and new functionalities and, as inter-system communication enabler, strongly support today's information society. The EMC<sup>2</sup> project aims to develop an innovative, sustainable service-oriented architecture for mixed criticality applications in dynamic and changeable real-time environments, helping the European Embedded Systems industry to maintain its leading edge position.

### R5COP (STAND T8)

*Reconfigurable ROS-based Resilient Reasoning Robotic Cooperating Systems*



European manufacturing is confronted with increasing product diversity and the ongoing need to cut production costs. R5-COP responds to this challenge with a focus on agile, transformable and reusable automation and robotics in which agile manufacturing paradigms and specifically modular robotic systems support model-based design, engineering, validation and fast commissioning, to reduce design, set-up and maintenance costs.

## WHAT WE DO

ARTEMIS Industry Association is the association for actors in Embedded Digital Technology within Europe. Together with Industry, ARTEMIS-IA focusses on connecting partners to develop technology that brings society more safety and improves their daily life.

The association aims to tackle the Research and Innovation (R&I) challenges faced by European industry by defining and implementing a coherent Strategic Research Agenda (SRA) for Embedded Digital Technology, which reflects the R&I needs of the industry. In this SRA, 4 main focus areas in Embedded Digital Technology are described:

- **Embedded Systems**
- **Cyber-Physical Systems**
- **Internet of Things**
- **Digital Platforms**

## MEMBERSHIP

The industry association is a membership organisation with around 180 members and associates from all over Europe and consisting of Industry, SMEs, universities and research institutes. The multidisciplinary nature of the membership provides an excellent network for the exchange of technology ideas, cross-domain fertilisation, as well as for large innovation initiatives.

ARTEMIS continuously promotes the R&I interests of its members to the European Commission and the Public Authorities of the participating states, among other as private partner in ECSEL Joint Undertaking.

More information can be found in the general ARTEMIS-IA flyer.



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