- **Session 2**   Moderator Hiro Ihara

(1) **The Quest for Autonomy Programming Dependably Adaptive R/T Applications in Cortex   by Paulo Verissimo**

   Uncertainty for system is considered in the field of car cooperation, terrestrial transportation, autonomous or remote flight and robotics in grabber and teaming

   Programming model for Dependable adaptive R/T system

   Demo of uncertainty by prototype vehicles

   Related list presented in the past

(2) **Service-Oriented Computing In Recomposable Embedded Systems by Yinong Chen**

   n   **Service-Oriented Computing is defined as new paradigm**

   n   **Service Providing**

   n   **Service Registry and Repository**

   n   **Computer aides programming for Application Building**

   n   **Application in Recomposable Embedded Systems**

   n   **Demo of miniature vehicles with autonomy**

(3)Moderator's Comment

Our group has shared technical issues in discussion on Dependability based on the fundamental concepts led by Jean-Claude Laprie for 20 years .

Although the work has greatly influenced the computing community, the notions were rather based on device-oriented, single,c omplex hardware and software level of non real-time systems except for some specific real-time areas such as aeronautics, aerospace, train, telephone exchange and industry by deterministic way of thinking.

The requirements for real-time information and control systems have been getting more diversified and complicated in real society for these 20 years, adding such the words as ubiquitous, autonomous, distributed, assurable and intelligent.

Robotics not only for traditional industry but also healing area and car automation having multiple dimensions are typical examples.

The advent of system level progress is significant, including LAN, WAN and so on, due to the social demand pull and unstable fragile society. From the presentations here, from system level points of view, WG10.4 is expected to start the 50th meeting with commemorative work that makes new criteria on Dependability, covering wider application reality including security against malicious attack and ambiguous system environment in order to communicate among computing areas.