The program of the 18ᵗʰ iCC

The next international CAN Conference (iCC) will take place in Baden-Baden, Germany. The two-days event is scheduled on May 14 and 15, 2024. Recently, the iCC program committee has finalized the conference program.

The iCC program committee chaired by the CiA Managing Director, Holger Zeltwanger, evaluated the submitted abstracts, selected the speakers, and grouped the papers to seven sessions. The conference starts with the keynote by Markos Moch from Cariad, a Volkswagen daughter company. His paper is titled "From Flexray to CAN-XL: Migrating real-time high-performance networks into the future". The VW group has started to consolidate its EE (electic/electronic) architectures towards E32.0 for all types of cars, e.g. volume, premium, sports, etc. and a solution is required to have one technology for all, together with some other handy features and thus, supported the CAN XL development. Moch will discuss challenges and gained possibilities of migrating Flexray networks to CAN XL using the example of the powertrain, also considering CAN FD and why this is only an intermediate solution.

The 21 selected papers are mapped to seven sessions comprising three presentations each. The sessions are named (in alphabetic order) application, CAN XL network design, functional safety, network design, security, software, and system design. It is obvious that many papers are somehow related to network and system design. Interesting are also the security-related papers. Of course, the conference covers many topics.

The CAN XL network design session starts with the paper titled "About clock tolerances and margins for physical-layer effects" by Dr. Athur Mutter from Bosch. The other two presentations are about CAN XL in-vehicle network validation (Patrick Isensee, C&S group) and CAN-XL EMC performance at car level (Frank Schade, VW). There is also another CAN-XL-related paper in the software session: Linux CAN XL support and programming by Dr. Oliver Hartkopp (Cariad/VW). In the security session, Peter Decker (Vector) will give a presentation about security concepts with CAN XL.

The conference program also includes several generic CAN- and CANopen-related papers. Functional safety in commercial vehicles is the topic of the presentation by Travis Breitkeutz (Caterpillar) and Dr. Chris Quigley (Warwick Control Technologies) will talk about cybersecurity in maritime CAN networks (NMEA 2000). Security is also the topic of Ben Gardiner (NMFTA) and Dr. Kenneth Tindell (Canis Labs), they discuss security requirements for vehicle security gateways.

Besides functional safety and cybersecurity, there are presentations about generic CAN bootloaders (Thorsten Gedenk, Emotas), dual-mode redundancy (Uwe Koppe, Microcontrol), and cabling in conjunction with appropriate CAN transceivers (Kent Lennartsson, Kvaser). The complete conference program is online as well as the registration possibility. The conference is accompanied by a tabletop exhibition. In the first evening a diner is planned. This gives the attendees an opportunity for social networking. ◄

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(Source: Kongresshaus Baden-Baden Betriebsgesellschaft mbH)