OBJECT MANAGEMENT GROUP ®

TC Meeting Date: 11 December, 2020
Reporting Chair: Sanford Friedenthal
Group page (URL): https://www.omg.org/syseng
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- **Tuesday, 1/2 day, 44 attendees**

- **Highlights from this Meeting:**
- **Challenges & Opportunities In an Era of Cyber-physical SoS**
  - Professor Martin Törngren from KTH Royal Inst. of Technology in Stockholm
  - Move towards Cyber-physical SoS to address challenges
  - Enabling technologies and digital infrastructure
  - Example: Sustainable smart roads (predictive maintenance and traffic control)
  - Need for new methodologies to deal with complexity
    - Experimentation, modeling to bridge multiple viewpoints, visualization to aid in collaboration and understanding

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- **Highlights from this Meeting (cont):**
- **SysML v2 update and demonstration – Friedenthal, Seidewitz, Bajaj**
  - **3 years since formation of SST, Initial submission August 2020,**
  - **Language updates to support verification, trade-off analysis**
  - **Emphasis on specifying graphical syntax using graphical BNF**
  - **API refinements**
- **Formal Methods for Specifying Modeling Languages – Elisa Kendall**
  - **Review broad landscape of formal methods**
  - **Models, modeling languages, formal theory and interpretation, ontology, logic, reasoning, …**

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- **Highlights from this Meeting (cont.):**
- **On the Semantics of SysML v2 – Ed Seidewitz, Conrad Bock**
  - **Start with simple user model**
  - **Relate back to metamodel foundation (e.g., types, features, values)**
  - **Interpret in terms of core semantics classification, specialization,, composition**