Welcome to the SEsCPS 2019 - breakout groups

Approach

- 1.5 hour discussions
- 0.5 hour continuation
- Plenary discussion

- Select topic (emerged from morning)
- Groups of 4 to 6 people (split if necessary)
- Guiding questions to steer discussions
- Plan slides for plenary presentation
  - First slide: topic + full names of participants
  - Send slides to organizers before the end of the session!
- Outcome will be important part of workshop report

Topics

1. What is the meaning of “intelligence” in CPS? 4
   - Cfr. to human intelligence?
   - What are the characteristics (S-M-A-R-T)?
2. What is the role of simulation in CPS?
   - How putting simulation in an engineering process?
   - What characteristics in focus?
   - Accuracy wrt models/results
3. What is the role of science and engineering models in digital twins? 4
   - How to leverage design models in operation? Accuracy issues
   - What is needed in the engineering of digital twins for CPS?
4. What is the role of humans in CPS? 6
   - What is the implication of different roles in the engineering of CPS (modeling, operating, ethics..)?
   - How to cope with/take advantage of human participation in CPS?
   - Just culture
5. How do sCPS work in society 4
   - Management, governance, assurance, responsibility, ethics
6. Uncertainty versus dependability with a focus on decentralization 0
   - Accuracy of models
7. Understanding security in hyper-connected CPS 0

Facultative guiding questions

- What is your topic about?
- Formulate the question you want to answer? Why is your question important?
- “Answer your question”
- What are the challenges?
- What are the particular action points for software engineering community? For whom is it action point?