Agenda

- Part 1
  - Introduction to MDD for RT/E systems & MARTE in a nutshell
- Part 2
  - Non-functional properties modeling
  - Outline of the Value Specification Language (VSL)
- Part 3
  - The timing model
- Part 4
  - A component model for RT/E
- Part 5
  - Platform modeling
- Part 6
  - Repetitive structure modeling
- Part 7
  - Model-based analysis for RT/E
- Part 8
  - MARTE and AADL
- Part 9
  - Conclusions
MARTE Frontiers and Challenges

- **MARTE define the language constructs only!**
  - Common patterns, base building blocks, standard NFP annotations
  - Generic constraints that do not force specific execution models, analysis techniques or implementation technologies

- **It does not cover methodologies aspects:**
  - Interface-Based Design, Design Space Exploration
  - Means to manage refinement of NFP measurement models
  - Concrete processes to storage, bind, and display NFP context models
  - Mapping to transform MoCCs into analysis models

MARTE is to the RTES domain as UML to the System & Software domain: a family of large and open specification formalisms!
Related links

- **The official MARTE web site:** [www.omgmarlet.org](http://www.omgmarle.org)
  - Tutorials, events, projects related and tools
  - On open source Eclipse plug-in for UML2 graphical modeling
  - MARTE implementation available within IBM RSA 7.0
    - Included the VSL editor

- **www.papyrusuml.org**
  - On open source Eclipse plug-in for UML2 graphical modeling
  - MARTE implementation available within the V1.8 release of the tool
    - Already available on:
      - [https://speedy.supelec.fr/Papyrus/svn/Papyrus/extensions/MARTE/head/](https://speedy.supelec.fr/Papyrus/svn/Papyrus/extensions/MARTE/head/)
  - Working on:
    - [https://speedy.supelec.fr/Papyrus/svn/Papyrus/core/...](https://speedy.supelec.fr/Papyrus/svn/Papyrus/core/...)