

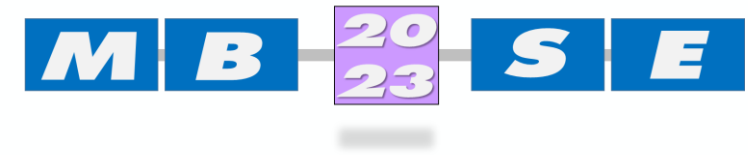
MBSE 2023

Marcel Verhoef

ESA ESTEC

16/11/2023

WELCOME TO ALL PARTICIPANTS



- 130 attendees, 90 external visitors
- 108 male, 22 female
- 7 core members of the MB4SE advisory group
- 47 participants from the space agencies (ESA, DLR, CNES, EUMETSAT, Egypt Space Agency)
- 16 participants from large-scale systems integrators (ADS, TAS, OHB, LEONARDO, ARIANEGROUP)
- 68 participants from industry
- 18 participants from MBSE technology providers
- 13 participants from academia
- 6 students
- 20 nationalities
- Over half of the participants are “new” to this community



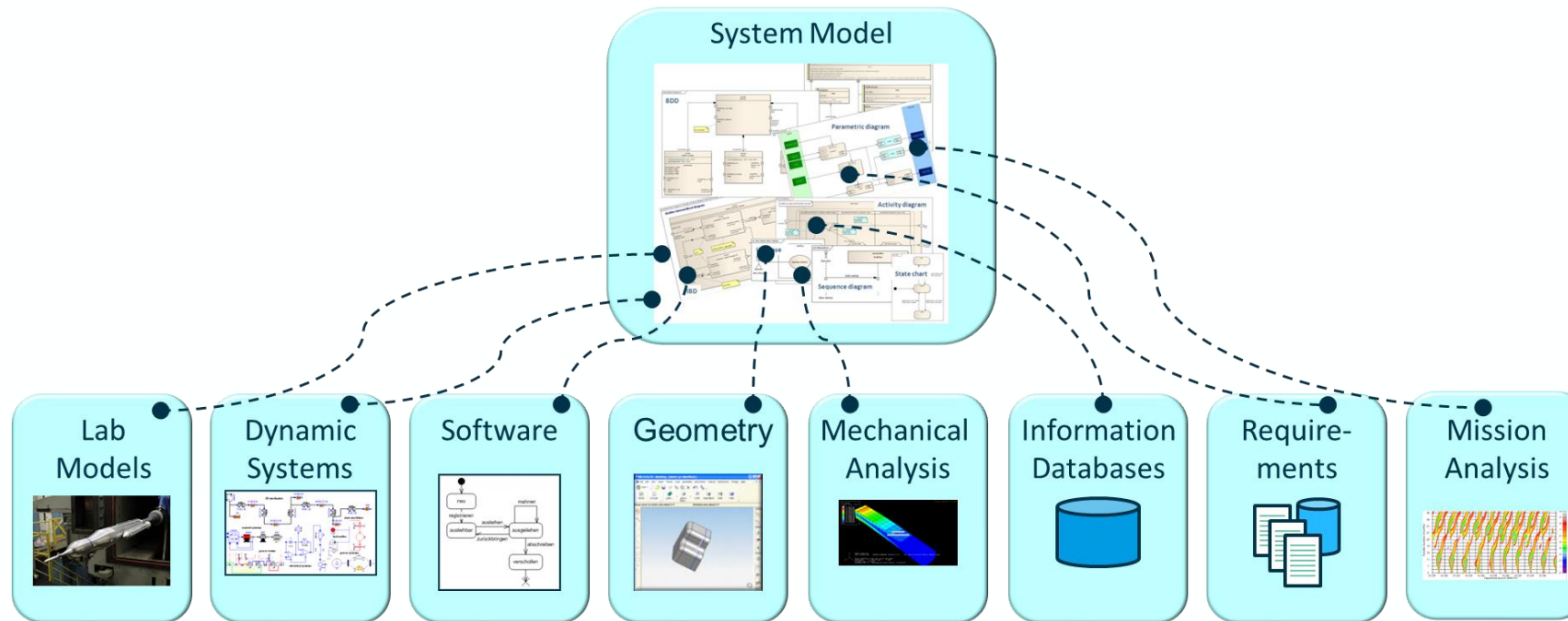
Community building

- Successful series of workshops held in 2020 (virtual / covid), 2021 (virtual / covid) and 2022 (hybrid, on-site)
- MBSE 2022 : co-organized with Airbus and CNES, 4 keynotes, 36 papers, 350 attendees + 150 remote (38 countries)
- **PRO** : high engagement has been essential to align, exchange lessons learned and celebrate achievements
- **CON**: need more time to discuss, challenge, explore, exchange ideas
- MBSE 2023 : **one-day interactive and thematic workshop**



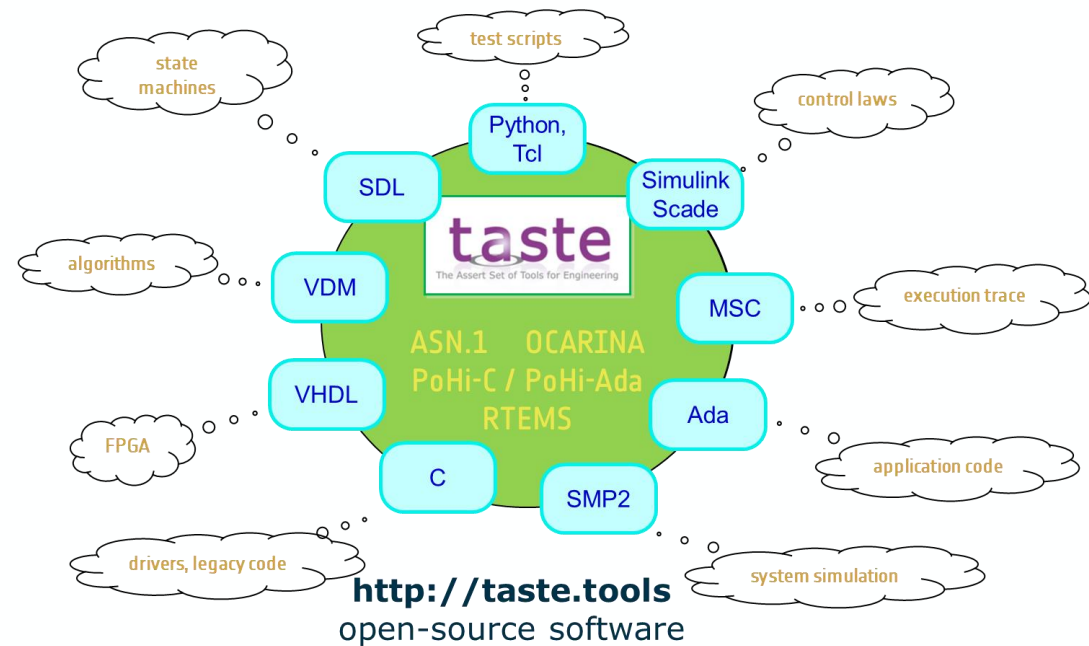
“reducing the gap between model-based systems engineering and domain-specific model-based approaches”

discuss new ideas, including lessons learned from attempts to bridge this gap, return of experience, hurdles to overcome, identified unresolved issues and open questions at the workshop



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(... and many more ...)



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- Problems identified for which existing solutions are already available with known good impact (**lack of awareness**)
- Problems identified for which a solution exists that might be a good fit (**lack of experience**)
- Problems identified for which multiple solutions exist that might be a good fit (**what path to follow, decision paralysis**)
- Problems identified for which existing solutions are not a good fit (**need for innovation**)

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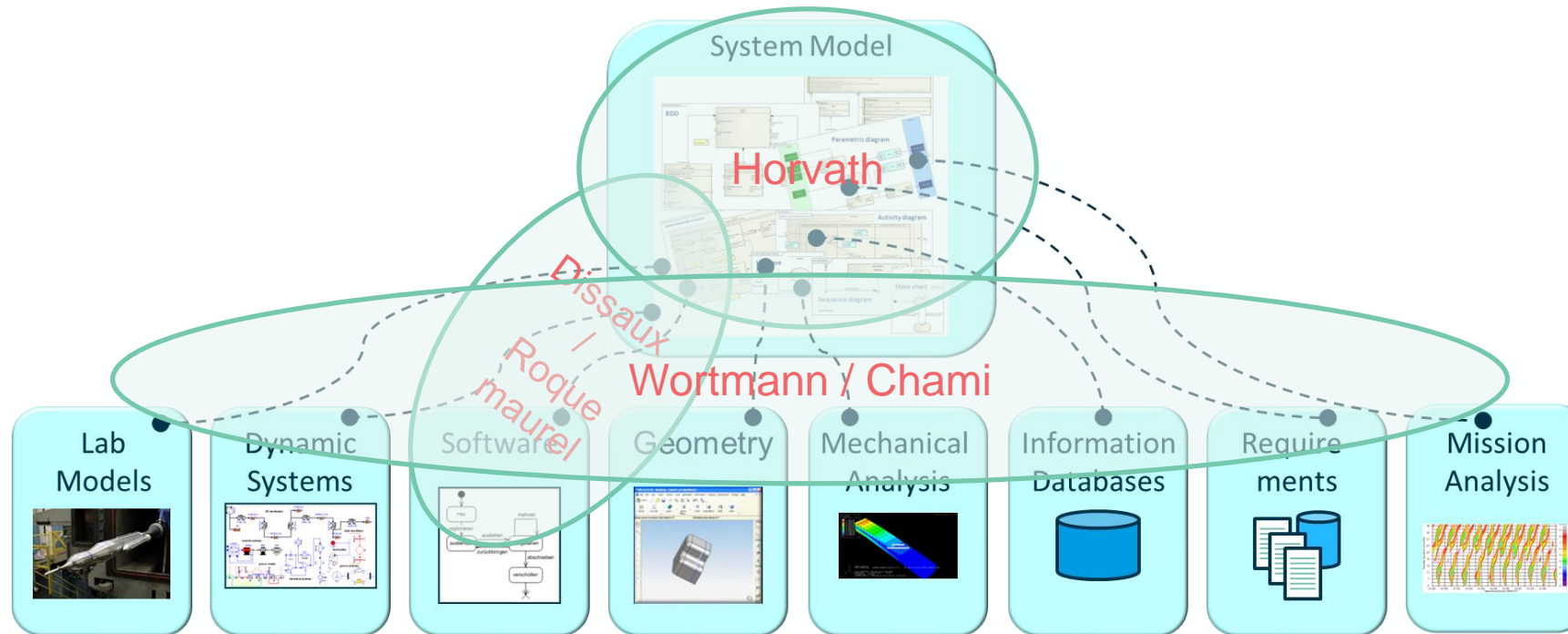
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the aim of the MBSE 2023 workshop is to

1. identify ways forward for improving the dialogue between all engineering disciplines; resulting in
 - concrete solutions to be adopted
 - proposals for practical experiments
 - ideas for new research and development
 - directions for further collaboration or harmonization
2. identify topics to include in the call for papers for [MBSE 2024](#), to ensure future follow-up

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PROGRAM



- 09:15 – 10:00 key-note speaker
- 10:00 – 10:55 elevator pitches (5x 10 minutes)
- 10:55 – 11:00 world-café introduction and kick-off AM
- 11:00 – 11:20 coffee break
- 11:20 – 12:55 world-café round 1, 2 and 3
- 12:55 – 13:55 lunch (ESTEC restaurant)
- 13:55 – 14:00 world-café kick-off PM
- 14:00 – 15:00 world-café round 4 and 5
- 15:00 – 15:20 preparations for plenary reporting
- 15:20 – 15:40 tea break
- 15:40 – 17:20 plenary reporting and discussion
- 17:20 – 17:30 reflections from key-note speaker
- 17:30 – 17:40 reflections from workshop organisers and MBSE 2023 close



WORKSHOP – ENGAGE, ENJOY





Professor Hans Vangheluwe

University of Antwerp
Department of Computer Science

Flanders Make

**Theory and Practice of Multi-paradigm
Modelling and Simulation**
A “most appropriate” talk