

The 13th Overture Workshop

in connection with FM'15, Oslo

Fuyuki Ishikawa
Peter Gorm Larsen



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Setting for the day

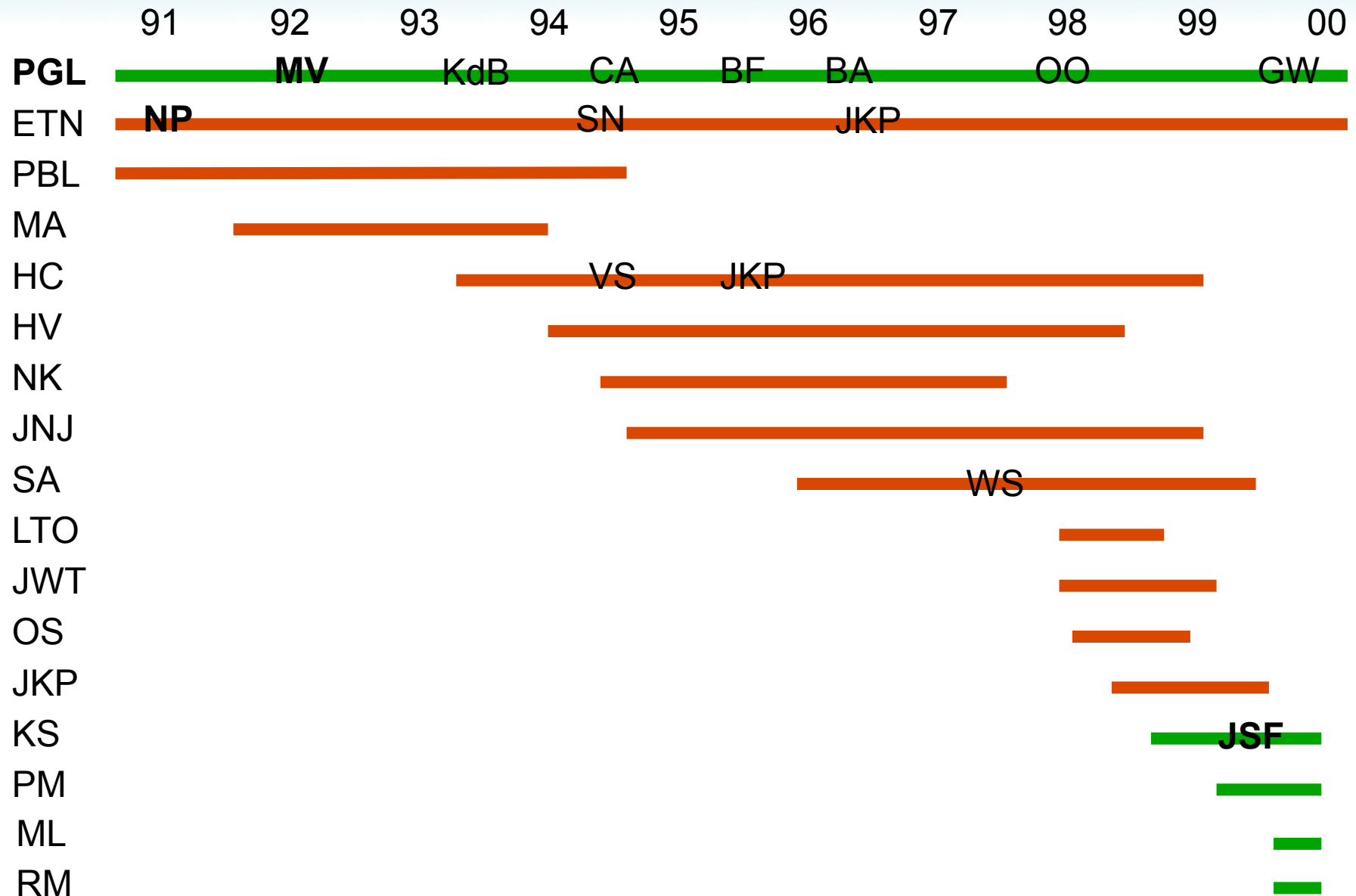
- Informal
- Interactive
- Productive



Where did it all start?

- 1991 – 2004: VDMTools developed at IFAD (1000++ users)
- 2004: Start of Overture (1st workshop 2005)
- 2004: VDMTools taken over by CSK
- 2004: FeliCa Networks start NFC firmware using VDM
- 2005: The VDM++ book is published
- 2008: VDMJ development started by Nick Battle
- 2009: VDMJ is incorporated into Overture
- 2010-12: Crescendo is build on top of Overture
- 2012-14: Symphony is build on top of Overture
- 2014: VDMPad is developed on top of VDMJ by Oda
- 2015: New GUI tools on top of Overture
- 2015-18: INTO-CPS will develop more extensions

IFAD VDMTools Staff Overview



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Many different Research projects

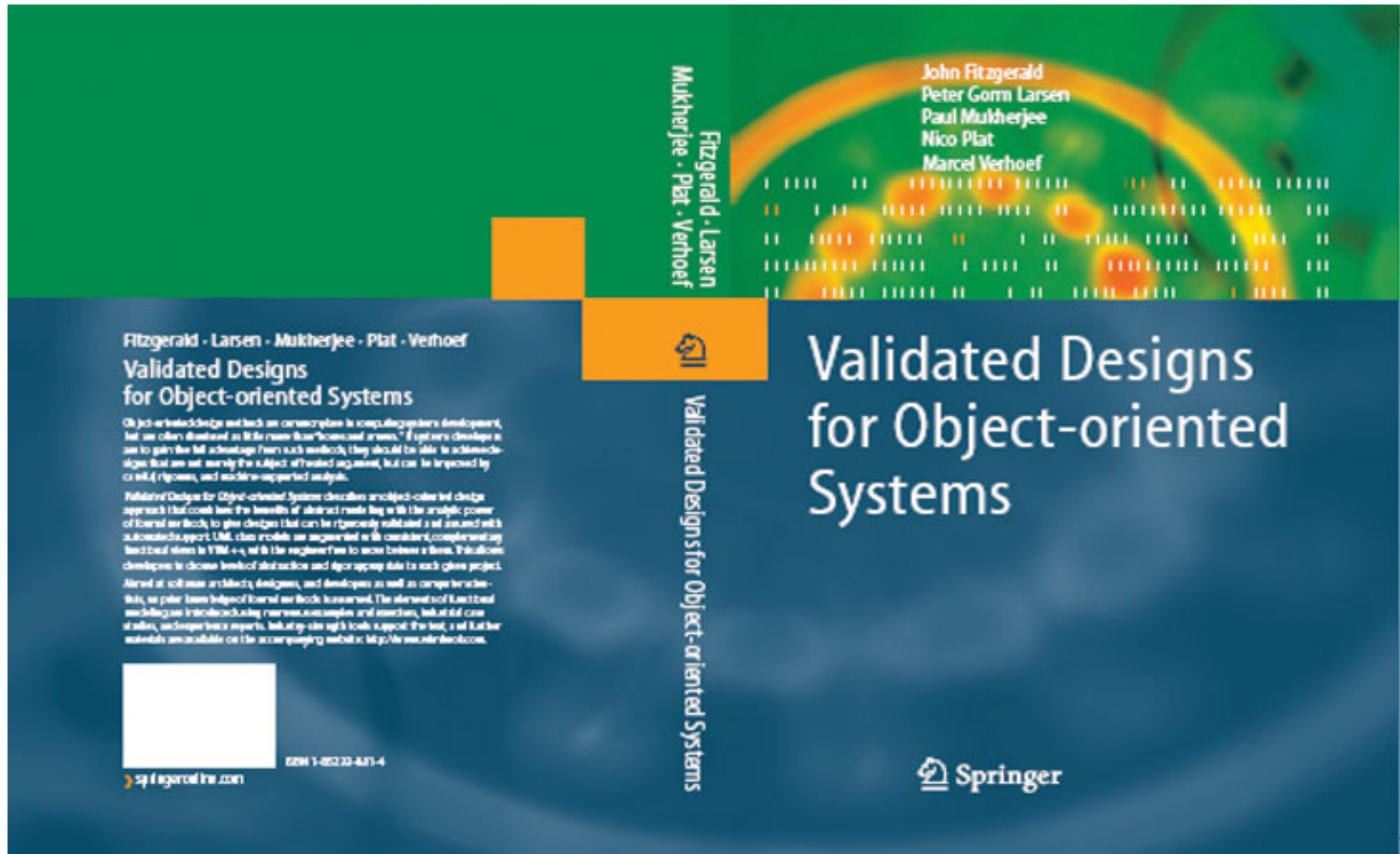
- IPTES (91-93) supporting executable DFDs
- Afrodite (92-95) including Cap Gemini (F)
- ConForm (93-94) including British Aerospace (UK)
- PICGAL (94-95) including Aerospatiale (F)
- UseGat (95-96) including Ansaldo (I)
- TIAPS (96) theorem proving support with Danish funding
- INFORMA (96-98) including Odense Steel Shipyard (DK)
- LEGO (97-98) including Baan Front Office Systems (DK)
- Spectrum (97-98) including Dassault Electronique (F)
- PROSPER (98-01) theorem proving with EU funding
- ISPAS (98-00) including Dassault Avionics (F)
- VICE (98-00) including Matra Bae Dynamics (F)
- ISEPUMS (99) including CE-CI (F)



Writing the VDM++ book was fun...



The VDM++ Book



During the writing disaster hit in...

- IFAD went bankrupt (2004)
- No possibility anymore to include a “light” version of VDMTools with the book
- Since the book focuses on tool usage we had a problem.....



The Start of Overture

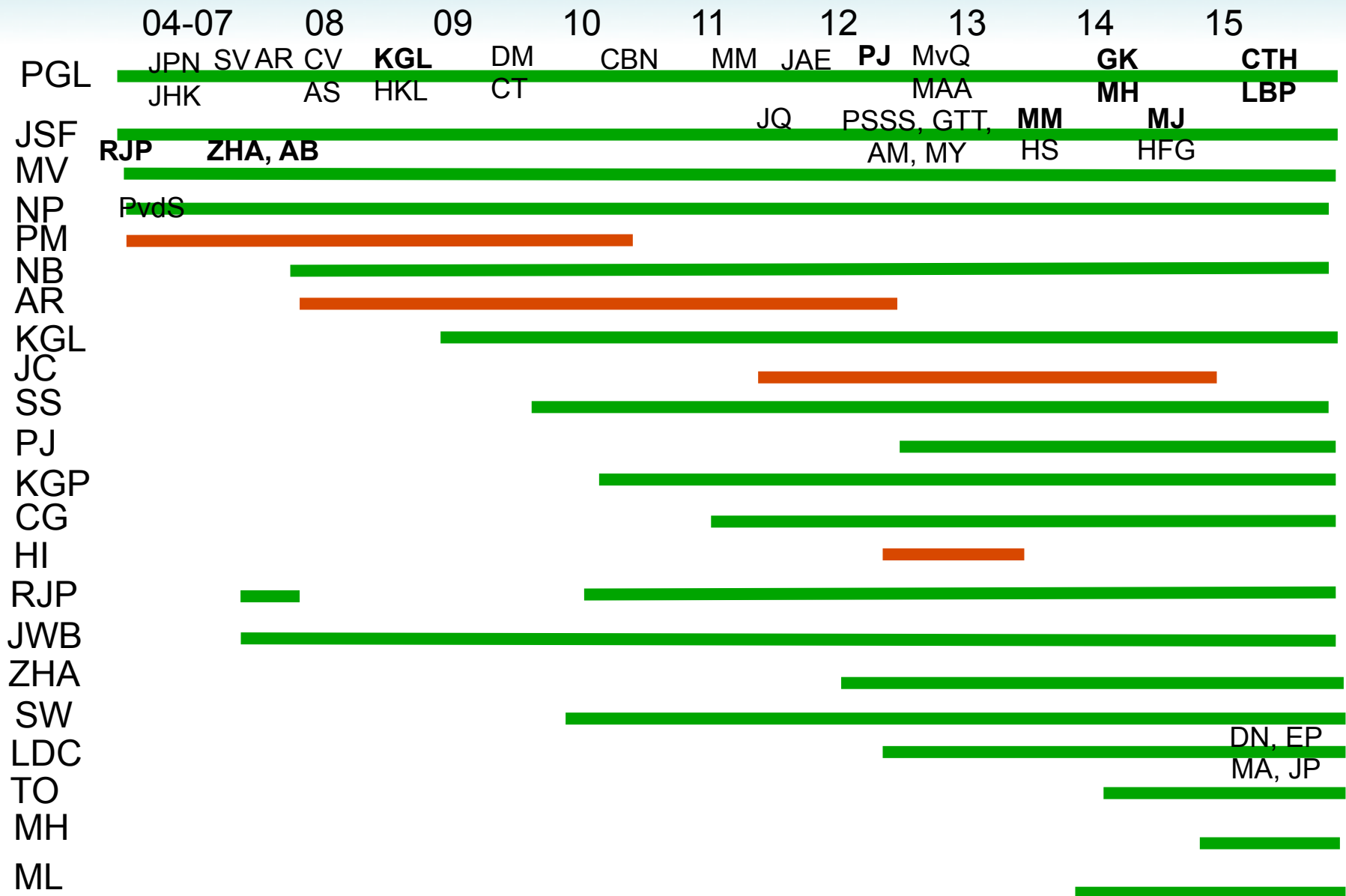
- Movement towards open source software
- New thinking, new technology in the area of IDEs and user interfaces
- Having more tools that support VDM++ can revitalise its use



- Goals:
 - To provide an industrial strength toolset supporting VDM++
 - To make an environment available in which it is possible to experiment with techniques for formal method tool support
 - To have fun



Overture/VDMJ Staff Overview



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Many different Research projects

- DESTECS (10-12) including Chess (NL), Neopost (NL) and Verheart (B)
- COMPASS (11-14) including B&O (DK) and Insiel (IT)
- CIP (14-15) including Terma (DK)
- Logistics for harvesting operations including AGCO (DK)
- INTO-CPS (15-17) including ClearSy (F), TWT (GER), UTRC (IRE) and Kongskilde (DK)

Agenda for the day

- 9:15:10:00 Invited Talk: **Taro Kurita**, Sony Felica
- 10:30: JODTool on the Overture Tool to manage formal requirement dictionaries, **Omori**, Araki and Larsen
- 10:55: VDM Animation for a Wider Range of Stakeholders, **Oda**, Yamamoto, Nakakoji, Araki and Larsen
- 11:20: Integrating the PVSio-web modelling and prototyping environment with Overture, **Masci**, Couto, Larsen and Curzon
- 11:45: Extending the Overture code generator towards Isabelle syntax, Couto and **Tran-Jørgensen**
- 12:10: Discussion about the future of the Overture community
- **12:30-14:00 Lunch**
- 14:00: Code Generation of VDM++ Concurrency, **Kanakis**, Larsen and Tran-Jørgensen
- 14:25: Generating Java RMI code for the distributed aspects of VDM-RT models, **Hasanagic**, Larsen and Tran-Jørgensen
- 14:50: Improving Time Estimates in VDM-RT Models, **Larsen**, Tran-Jørgensen and Larsen
- 15:15: Discussion about the future of the Overture community
- 16:00: Case Studies on Combination of VDM and Test-Driven Approaches: Application, Model Finding and Refinement, **Ishikawa**
- 16:25: Pacemaker Parameter Tuning using Crescendo, Gamble, **Mansfield**, Fitzgerald and Larsen
- 16:50: TASTE for Overture to keep SLIM, **Verhoef** and Perrotin
- 17:15: Discussion about the future of the Overture community
- 17:30: Closing
- 19:00: Dinner (12 of us) <http://www.dengladegris.no/> (wish to join?)