

PDE 2005 Final Program

<http://www.marc.gatech.edu/events/pde2005/>

Unless *otherwise noted*, activities are held in the *GIT Manufacturing Research Center (MARC) Auditorium & Atrium* (1st floor)

April 19 Tuesday

6:00 PM Welcome Reception (*GIT Wardlaw Center*)
8:00 PM Close

April 20 Wednesday

7:30 AM Breakfast + Registration

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| Opening | 8:00 AM | Introductions |
| | 8:10 AM | Welcome by Prof. Charlie Liotta - GIT Vice Provost for Research & Dean of Graduate Studies |
| | 8:30 AM | Program Overview & Logistics |
| Keynote | 8:45 AM | <i>A Future for Systems Engineering Tools</i> Steve Jenkins (NASA-JPL) |
| | 9:30 AM | Coffee Break + Student Posters |

Session 1 Mechatronics and Systems Engineering

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| 1.1 | 10:00 AM | <i>SysML Overview</i> Sandy Friedenthal (Lockheed Martin Corp.) |
| 1.2 | 10:25 AM | <i>Experiences Using SysML Parametrics to Represent Constrained Object-based Analysis Templates</i> Russell Peak (GIT), Sandy Friedenthal (Lockheed Martin), Alan Moore (ARTiSAN Software), Roger Burkhart (Deere and Co.), Steve Waterbury (NASA-GSFC), Manas Bajaj (GIT), Injoong Kim (GIT) |
| 1.4 | 10:50 AM | <i>Next Generation Simulation-based Design Technologies for Electronics Product Realization</i> Manas Bajaj (GIT), Russell Peak (GIT), Dirk Zwemer (AkroMetrix), Mike Dickerson (InterCAX), Tom Thurman (Rockwell Collins), Kevin Brady (NIST), John Messina (NIST) |
| | 11:15 AM | Discussion |
| | 11:45 AM | Lunch + Student Posters |

Session 2 PLM

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| 2.1 | 1:00 PM | <i>Multiview: A Common Data Schema for Complex Systems</i> James Colson (USAMC LOGSA), John Reber (Trident Systems) |
| 2.2 | 1:25 PM | <i>Strategic R&D Value Lifecycle Management</i> Doug Bodner, Mike Pennock, Bill Rouse (GIT) |
| 2.3 | 1:50 PM | <i>PLM Services Standardization - A Leap forward in Product Data Communication</i> Max Ungerer (PROSTEP AG), Lutz Laemmer (PROSTEP AG), Matthias Grau (PROSTEP ITS GmbH) |
| 2.4 | 2:15 PM | <i>Implementation and rigorous verification of STEP-TAS interfaces</i> Hans Peter de Koning, Simon Appel, David Alsina, Duncan Gibson (ESA) |
| | 2:40 PM | Discussion |
| | 3:10 PM | Coffee Break + Student Posters |

Session 3 Engineering Frameworks

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| 3.1 | 3:30 PM | <i>IDA-STEP: Towards a Standards-based Engineering Framework for Next-Generation PLM</i> Dirk Zwemer (InterCAX), Manas Bajaj (GIT), Lothar Klein (LKSoft), R. Peak (GIT), Mike Dickerson (InterCAX) |
| 3.2 | 3:55 PM | <i>Capturing the Relationships between Design Problems and Analysis Models</i> Greg Mocko, Jitesh Panchal, Farrokh Mistree (GIT) |
| 3.4 | 4:20 PM | <i>Domain Integration in the Product Development Process</i> Matthias Grau (PROSTEP ITS GmbH), Manfred Harms (Airbus Deutschland GmbH) |
| | 4:45 PM | Discussion |
| | 5:15 PM | Close |

Evening Social

5:15 PM Cookout (*GIT MARC outdoor patio*)
7:00 PM Baseball Game (*GIT Chandler Stadium - on campus*)

April 21 Thursday

7:30 AM Breakfast and Registration

Session 4 Engineering Frameworks

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| 4.1 | 8:00 AM | <i>Product Data Exchange at The Boeing Company</i> Greg Smith (Boeing) |
| 4.2 | 8:25 AM | <i>The Pan Galactic Engineering Framework</i> Stephen Waterbury (NASA/GSFC) |
| 4.3 | 8:50 AM | <i>Baghera View Version 3</i> Eric Lebegue (HANOP, France), Hans-Peter De Koning (ESA/ESTEC), Thierry Warrot (CNES, France), Jean-Luc Le Gal (CNES, France), Souheil Soubra (CSTB, France) |
| | 9:15 AM | Discussion |
| | 9:45 AM | Coffee Break |

Session 5 CAD Exchange and Tools

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| 5.1 | 10:00 AM | <i>CAD Data Translation: Past, Present and Future</i> T. Charles Chen, Terry McGowan (Boeing) |
| 5.2 | 10:25 AM | <i>History-based parametric exchange - the macro-parametric approach</i> Soonhung Han, Byungchul Kim, Jinhyun Yun (KAIST) |
| 5.4 | 10:50 AM | <i>An Open Source EXPRESS Parser and Application Development Kit</i> Andy Carpenter, Alan Williams, David Withers (Univ Manchester) |

11:15 AM Discussion

11:45 AM Lunch + Student Posters

Session 6 Federated and Dynamic Data Exchange

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| 6.1 | 12:45 PM | <i>Domain Specific Product Description Exchange</i> Andy Evans (Xactium Limited) |
| 6.2 | 1:10 PM | <i>Adaptive Data Access Interface for STEP Model Repositories - Supporting AEC PLM</i> Chuck Eastman, Frank Wang, Donghoon Yang (GIT) |
| 6.3 | 1:35 PM | <i>Federated Product Data Exchange</i> Mark Reisig (Federation Inc.) |
| 6.4 | 2:00 PM | <i>Federated Product Models for Simulation-based Product Lifecycle Management</i> Manas Bajaj, Chris Paredis, Tarun Rathnam, Russell Peak (GIT) |

2:25 PM Discussion

2:55 PM Coffee Break

Campus Tour

3:15 PM Campus Tour (including PLM Center and Collaborative Visualization Environment (CoVE))

5:00 PM Close

Evening Social5:45 PM Group departure from *Georgia Tech Hotel* lobby (optional)6:15 PM Sightseeing / shopping at *Lenox Square mall* (optional)7:15 PM Dinner (at *Mick's in Lenox*)**April 22 Friday**

7:30 AM Breakfast and Registration

Session 7 Systems Engineering

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| 7.1 | 8:00 AM | <i>SIMBASE: fostering the interoperability among System Engineering, Logistics and M&S in the Simulation Based Acquisition process (SBA).</i> Kjell Bengtsson (EPM Technology), Curzio Batini (Datamat), Raffaella Colaci (Datamat), Emilliano Dall'Acqua (Datamat), Timothy M. King (LSC), Jochen Haenisch (EPM Technology) |
| 7.2 | 8:25 AM | <i>PLCS Pilot for New Norwegian Frigates</i> Kjell Bengtsson (EPM Technology), Tor Arne Irgens (Norwegian Defence Logistics Organisation -- NDLO), Trine Hansen (DNV), Det Norske Veritas (DNV), Jochen Haenisch (EPM Technology) |
| 7.3 | 8:50 AM | <i>PLM for the US Army</i> Raj Iyer (US Army Tank Automotive R&D Center) |

9:15 AM Discussion

9:45 AM Coffee Break

Session 8 Process Modeling

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| 8.1 | 10:00 AM | <i>Deriving a Product Model from Heterogeneous Processes</i> Ghang Lee (GIT) |
| 8.2 | 10:25 AM | <i>Reusable Design Processes via Modular, Executable, Decision-Centric Templates</i> Marco Gero Fernandez, Jitesh Panchal, Janet Allen, Chris Paredis, Farrokh Mistree (GIT) |
| 8.3 | 10:50 AM | <i>3-P Information Model for Designing Simulation-Based Multiscale Design Processes</i> Jitesh Panchal, Janet Allen, Farrokh Mistree (GIT) |

11:15 AM Discussion

11:45 AM Lunch + Student Posters

Session 9 Round Tables & "Birds of a Feather" Meetings1:00 PM Meetings (in *GIT MARC conference rooms*)*Topics including mechatronics, systems of systems (SoS), E/MCAD interoperability, and others determined by attendees during the workshop.*

3:00 PM Coffee Break

Session 10 Round Tables & "Birds of a Feather" Meetings

3:15 PM Meetings (continued)

4:45 PM Close

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