

Tuesday, 11 July

0700-0745

Speakers/Session Chairs' Breakfast

Sponsored by Northrop Grumman - ChampionsGate

0700-0800

Continental Breakfast - *Foyer*

0700-1700

Symposium Registration - *Rotunda*

0700-1800

Speaker Ready Room - *Wentworth*

0700-1900

Cyber Café *sponsored by Boeing* - *St. Andrew A*

0800-0930

Tuesday Keynote Speaker - *National CD* - See page 40

Systems Engineering for the Planet

Annik Magerholm Fet,

Norwegian University of Science and Technology

0930-1000

Coffee Break in Exhibit Hall

0930-1800

Exhibits Open

0935-1725

Technical Information Exchange Session (TIES) Presentations -

ChampionsGate

See page 39

0945-1715

Full Day Optional Tutorials (Ticket Required) - See page 41

Tutorial F03

Introduction to the System Modeling Language (SysML)

Sanford Friedenthal, *Lockheed Martin*

Alan Moore, *Mathworks*

Rick Steiner, *Raytheon*

Location: *Royal Melbourne A*

Tutorial F04

System Analysis, Design, and Development

Charles S. Wasson, *John Wiley Author*

Location: *Royal Melbourne B*

1000-1130

SESSION 4: Technical Paper & Panel Tracks

See page 36

1000-1800

INCOSE Meetings - See **INCOSE Business Meetings** - pg 159

Tuesday, 11 July *(continued)*

1130-1300

Lunch in Exhibit Hall

1300-1430

SESSION 5: Technical Paper Tracks & Working Group Presentation

See page 37

1300-1700

Half-Day Optional Tutorials *(Ticket Required)* - See page 43

Tutorial H03 **Introduction of the Systems Engineering Dual Vee Model**

Hal Mooz and Kevin Forsberg,
Center for Systems Management

Location: *Royal Dublin A*

Tutorial H04 **Architecting and Engineering Systems, Processes, and Organizations Using the Design Structure Matrix (DSM)**

Tyson Browning, *Texas Christian University*

Location: *Highland EF*

1430-1500

Coffee Break in Exhibit Hall

1500-1630

SESSION 6: Technical Paper Tracks & Working Group Presentation

See page 38

1700-1800

Exhibits Social Hour - Fun Night *Tropical Theme*

Technical Paper Matrix

TUESDAY, 11 JULY 2006			
SESSION	ENABLER	APPLICATION SECTOR	PAPERS
4.1	S.E. Management Process	Multiple	1
		Enterprise	2
4.2	S.E. Management Process	Multiple	1
		Aerospace & Defense	1
	S.E. Support Process	Multiple	1
4.3	Modeling & Tools	Multiple	3
4.4	S.E. Technical Process	Transportation	2
		Aerospace & Defense	1
5.1	Systems Science	Enterprise	3
5.2	S.E. Management Process	Aerospace & Defense	1
		Enterprise	2
5.3	S.E. Technical Process	Consumer Goods	2
		Emerging Technologies	1
6.1	Specialty Engineering	Aerospace & Defense	2
	S.E. Support Process	Infrastructure	1
6.2	Systems Science	Multiple	3
6.3	S.E. Technical Process	Infrastructure	1
		Multiple	3

National A

National B

National C

National D

Royal Dublin A

Royal Dublin B

Session Chair:	4.1 SE Management Process <i>J. Hofmeister</i>	4.2 SE Management Process <i>J. Lake</i>	4.3 Modeling & Tools <i>J. Riley</i>	4.4 Specialty Engineering <i>S. Jackson</i>	4.5 PANEL <i>Moderator: A. Zommenshain</i>	4.6 PANEL <i>Moderator: Sarah Sheard</i>
1000-1025	4.1.1 Ten Design Principles: Some Implications for Multidimensional Quantification of Design Impacts on Requirements T. S. Gilb, RPL	4.2.1 A Diagnostic Approach to Risk Driver Definition E. Stump, Galorath Incorporated	4.3.1 Meeting the Challenge of Knowledge-Creating Systems J. N. Martin, The Aerospace Corporation ***	4.4.1 Fine-grained Method and Tool Integration for Better Automotive Software F. Altheide, University of Paderborn; K. Buhr, Technische Universität Berlin H. Doerr, DaimlerChrysler AG	The Integration Process - An Unresolved Issue for Systems Engineers Panelists: E. Honour, Honourcode, Inc. J. Ben-Asher, Technion J. Grady, JOG System Engineering U. Orion, El-Op Israel J-P. Lerat, SODIUS J. Kasser, University of South Australia	Is Systems Engineering for "Systems of Systems" Really Any Different? Panelists: B. Boehm, University of Southern California R. Abbot, The Aerospace Corporation T. Ferris, University of South Australia J. Long, Vitech Corp. L. Pohlmann, Strategies Consulting
1030-1055	4.1.2 Project-driven Adaptation of Software Life Cycle Model E. M. Barnard, IFS South Africa	4.2.2 How Planning for Success Can Lead to Catastrophic Failure W. W. Schoening, The Boeing Company	4.3.2 Platform Identification Using Design Structure Matrices K. Kalligeros, O. de Weck, R. de Neufville, MIT A. Luckins, BP Exploration and Production	4.4.2 Lessons Learned from Synchronizing Complex Systems Development within Automotive Industry H. Negele, R. Schmidt, BMW Group; S. Finkel, S. Wenzel, 3D Systems Engineering GmbH		
1100-1125	4.1.3 i-pub: Status, Insights and Visions E. Herzog, A. Panalkow, Syntell/AB	4.2.3 Systems Engineering Professional Development and Certification G. H. Fisher, The Aerospace Corporation (SE Support Process)	4.3.3 Applying Systems Modeling Language to A Simple Hardware System J. C. Hsu, The Boeing Company	4.4.3 Extending Platforming to the Sequential Development of System Families R. C. Bous, E. F. Crawley, MIT		

Session Chair:	5.1 Systems Science <i>R. Savage</i>	5.2 SE Management Process <i>D. Norman</i>	5.3 SE Technical Process <i>D. Battersbry</i>	5.4 Working Group Presentation <i>J. Martin</i>
1300-1325	5.1.1 Enterprise Opportunity and Risk <i>B. E. White, The MITRE Corporation</i>	5.2.1 A National Approach to Systems Integration Skills Base Development in Australia <i>S.C. Cook, CED/SC, UniSA; L. Scarra, B. Bates, D. Namagopal, DSTO; S. Allison, Allison & Assoc.; D. Shackleton, Shackleton Management Solutions Pty Ltd; A. Yates, Government of S. Australia Defence Unit</i>	5.3.1 Lessons Learnt From the Applications of QFD to the Definition of Complex Systems <i>A. Hari, SEEC UNISA; J. E. Kasser, University of South Australia; M.P. Weiss, Technion * *</i>	GEOSS
1330-1355	5.1.2 Cross-Cultural Issues Associated with the Application of ISO/IEC 15288 Standard <i>T. L. Ferris, University of South Australia</i>	5.2.2 Optimizing Quality Assurance for Better Results <i>N. Malotoux, N R Malotoux - Consultancy</i>	5.3.2 On the Systematic Use of Budget-Based Design <i>H. J. Freriks, Océ-Technologies; B.V-WPMH Heemels, G. J. Muller, Embedded Systems Institute; J. H. Sandee, Technische Universiteit Eindhoven</i>	ISO 15288
1400-1425	5.1.3 Systems Engineering an INCOSE Chapter <i>P. R. Davies, Thales UK Ltd.</i>	5.2.3 Capitalizing On Systems Engineering <i>J. J. Sherey, CTT, Inc</i>	5.3.3 SysML-Based Systems Engineering Using a Model-Driven Development Approach <i>H-P. Hoffmann, I-Logix</i>	ISO 15504

Session Chair:	6.1 Specialty Engineering	6.2 Systems Science	6.3 SE Technical Process	6.4 Working Group Presentation
1500-1525	E. Rajabally 6.1.1 The Application of Architecture Frameworks to Modelling Exploration Operations Costs R. Shishko, Caltech Jet Propulsion Laboratory	J. Hofmeister 6.2.1 Tradeoff Studies and Cognitive Biases E. D. Smith, A. T. Bahill, University of Arizona	D. Norman 6.3.1 Threads of Reasoning: A Case Study H. Sandee, Technische Universiteit Eindhoven; WPMH Heemels, G. J. Muller, Embedded Systems Institute; P. van den Bosch, Qcè Technologies; By: MHG Verhoef, Chess Information Technology BV	R. Jain SE Curriculum
1530-1555	6.1.2 Using Cognitive Engineering to Improve Systems C. A. Bonaceto, K. J. Burns, The MITRE Corporation	6.2.2 Systems Engineering Model for Integrability (SEMI): A Three Step Process for the Continuous Development of Highly Integrated Enterprise Applications J. W. Lewis, L3 Comm. Titan	6.3.2 No Cure No Pay: How to Contract for Software Services on a No Cure No Pay Basis T. Gilb, Result Planning Limited	Se Repository
1600-1625	6.1.3 A Value-Based Theory of Systems Engineering B. Boehm, A. Jain, University of Southern California (Support Process)	6.2.3 Conflict in Systems Engineering Product Data Exchange Standardisation R. Eckert, EADS Germany GmbH	6.3.3 Application of Patterns to Systems Engineering and Architecting R. J. Cloutier, J. Boardman, D. Verma, Stevens Institute	ABET
1630-1655			6.3.4 Impact of Embedded Software Technology on SE L. J. Doyle, ITT Industries; M. C. Pennotti, Stevens Institute	

Technical Information Exchange Session (TIES) Presentation Schedule

- Location:** *ChampionsGate (Lobby Level)*
See page 46 for Presenter Details
- 0935-1100
TIES.01** **Definition of New Complex Systems Using
Quality Function Deployment (QFD)**
Amihud Hari, Design Speedovation Inc.
- 1105-1230
TIES.02** **Multi-Objective Decision Analysis
Techniques For Systems Engineering**
*Gregory S. Parnell, U.S. Military Academy
Edward Pohl, University of Arkansas*
- 1300-1425
TIES.03** **“Systems Engineering and Management
– Thinking Outside the Box”**
*Howard Eisner,
The George Washington University*
- 1430-1555
TIES.04** **Dealing with Uncertainty in Systems
Engineering**
*Mark Powell,
Attwater Consulting and Stevens
Institute of Technology*
- 1600-1725
TIES.05** **Multi-Channel Modeling**
*Jeffrey O. Grady,
JOG System Engineering, Inc.*