Workshop Schedule

Monday March 25: Tutorials

7:00 – 2:30 Registration outside 32-123 (MIT Stata Center Building)

Check for the latest schedule at the registration desk for room locations.

	BEGINNERS	EXPERIENCED USERS
8:00-9:30	**STAMP Intro and Overview of STPA and CAST** Nancy Leveson **Room 32-123**	**STPA and CAST Facilitation** John Thomas **Room 32-082**
9:45-11:15	**STPA Intro** John Thomas **Room 32-123**	**Identifying Leading Indicators** Nancy Leveson, Diogo Castilho **Room 32-144**
11:30-1:00	**Introduction to CAST** Nancy Leveson, Darren Straker, Shem Malmquist **Room 32-123**	**Enhancing Human Factors Analysis** John Thomas **Room 32-141**

Lunch break (1-2:30)

2:30-5:00	**Cybersecurity in STPA (2:30-3:30)** Col. Bill Young **Room 32-082** **Cybersecurity Practice (3:30-5:00)** Col. Bill Young **Room 32-082**	**CAST Practice (2:30-5:00)** Shem Malmquist, Darren Straker **Room 26-152**	**STPA Practice (2:30-5:00)** Diogo Castilho, Lawrence Wong, Michael Schmid, Dylan Muramoto **Room 32-144**

Tuesday March 26: Presentations (Room 32-123)

7:30 – 1:30 Registration outside Room 32-123

Time	Presentation
8:00	Welcome: Nancy Leveson and John Thomas
8:30	Greg Pope (LLNL) *Risk Management Using STPA, Restarting Widget Production*
9:00	Amardeep Sidhu, Shabin Mahadevan (Zenuity), *STPA Analysis of Safety Measures for Zenuity's Auto Valet Parking Feature*
9:30	Michael Hurley (BAE) *Designing for Safety: STAMP and MBSE*
10:00	BREAK
10:20	Anna G. (UK Cyber Security Center) *Methodological Findings from Applying STPA in Security Case Studies*
10:50	Diego Castilho (MIT and Brazilian Air Force) *Active STPA for Safety Management During Operations*
11:20	John Thomas, *STPA for Autonomous Automobiles*

LUNCH: 12:00-1:30: **Birds of a Feather Discussions (places and groups TBD)**

Time	Presentation
1:30	Standards Presentations and Group Discussion Presenters and discussants from GM, Ford, Embraer, MIT
2:30	BREAK
3:00 – 5:30	Industrialization Presentations and open discussion Presenters and discussants from GM, Boeing, FedEx, Ford, Embraer, Akamai, USAF, UK Cyber Center, Hong Kong Air Accident Investigation Bureau, etc

6:00-8:00 Light Dinner Buffet, Poster Session

Posters:

Gualeni, Bongermino (Univ. of Genoa), "Application of CAST to Costa Concordia Accident"

Bjornsdottir (Stiki), "Risk Analysis in Pension Fund Investment"

Okada (Nissan, JASPAR), Hashimoto (Hitachi), "STPA Trial Case for Automated Driving System Life Cycles"

Souza, Pereira, Pagliares, Hirata (ITA), "WEBSTAMP: A web application for STPA and STPA-Sec"

Brooks, Ochieng (Imperial College), "Using STPA and STPA-Sec for the Safety and Security Analysis of Road Transport"

Kawabe (Univance): "Applying STAMP/STPA to Human Safety System for Sea and River Tourism and Other Ship Operation"

Tsitonis, Androutsos, Armoutakis, Dimosiaris, Voulgaridis, Petras, Spanopoulos, Dokas (Democritus University of Thrace), "STPA Analysis Applied to a Road Construction Site"

Kirizakis, Androutsos, Armoutakis, Dimosiaris, Voulgaridis, Petras, Spanopoulos, Dokas (Democritus University of Thrace), "Railroad Crossing Safety Specifications Using STPA"

Canham (UK Healthcase Safety Investigation Branch), Jun (Loughborough University): "Exploring the Applicabililty of STAMP (CAST) in Patient Safety Incident Analysis in UK Healthcare"

Wolfgang Loppitsch, Reinhard Braunstingl and Ioana Koglbauer, Graz University of Technology, "CAST Analysis of the Accident N4252G"

Wednesday March 27 (Room 32-123)

Time	Presentation
8:30	Ishihama, Katahira, Thomas, Leveson (JAXA and MIT) *STPA Applied to Next Generation Intelligent Rover System Development for Mission Safety Analysis*
9:00	Sahay, Sepulveda (Tech. Univ. of Denmark), *Cyber Risk Analysis of Ship Systems using STPA*
9:30	Leveson, MIT, *Improving the Standard Risk Matrix using STPA*
10:00	BREAK
10:30 -12:30	IMPROVING ACCIDENT ANALYSIS USING CAST: Duzgun (Colorado School of Mines) and Leveson (MIT), *Analysis of Soma Mine Disaster* Malmquist (FedEx), Leveson (MIT), Larard (Cathay Pacific), Perry (FedEx), Straker (HK AAIB), *Increasing Learning from Accidents: A Systems Approach Illustrated by the UPS Flight 1354 Birmingham Airport Accident* Straker (HK AAIB), group discussion and group exercises

12:00-1:30 Lunch break

Time	Presentation
1:30	Sugawara, Ishihama, Katahira (JAXA), *STPA Applied to New Satellite Development and Lessons Learned*
2:00	Hegde, Nuesch, Mensah-Brown (Ford), *Abstraction & Decomposition: Performing Multi-level Analysis using STPA*
2:30	Lawrence Wong (MIT) and Lisa Singer (Dana Farber Cancer Institute), *STAMP for Hospital Safety*
3:00	BREAK
3:30	Souza, Cesar, Bezerr, Hirata (ITA), *Using STAMP for Analysis of Security and Data Privacy*
4:00 - 5:00	Leveson and Thomas (MIT) *Common Mistakes in the Use of STPA and CAST*
4:30	Canceled: *Use of STPA in the new AF Ground Based Strategic Deterrence (GBSD) Program*

Thursday March 28 (Room 32-123)

Time	Presentation
8:30	Merladet, Lahoz, Silveiro, Fugiara (ITA): *STPA Applied to Launch Operations Management*
9:00	Weller-Fahy, James, Quintero, Elkin, Cuevas, McPartland (Lincoln Lab), *Systems Theoretic Process Analysis for Security of Aircraft Systems*
9:30	Reiser, Marginez, Lahoz, Villani (Embraer, ITA): *STPA Analysis of Aircraft Landing Phase with Focus on Runway Excursion*
10:00	BREAK
10:30	Cook, Fan (GM), *Application of STPA for Human Data Annotation as Part of Automated Driving Vehicle Dev*
11:00	Karatzas and Chassiakos (Univ. of Patras), *STPA of Demand-Side Load Management in Smart Grids*

11:30-1:00 Lunch break

Time	Presentation
1:00-3:00	Open discussion and planning

12:00 to 5:00 Consortium Members Meeting on Automotive Safety (email jthomas4@mit.edu for info)