Welcome to STAMP/STPA 2019

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Zenuity

Attendance

- 416 people registered (28% more than last year)
- Each year we have grown by at least 25%
- Industries represented

Aviation 153 Defense 125 Safety 104 Academia/Universities 87 (*) Automotive 72 Software 65 Security 47 Transportation 45 Power/Energy/Nuclear 27 Robotics 23 Oil/gas 20 Medical/Healthcare 20

Rail 17 Training 15 **Communication 15** Space 14 **Environmental 11** Insurance, Financial 6 Maritime/Ships 3 Insurance 3 **Financial 3** Mining 3 **BioPharma 3** News and Entertainment 1

(adds up to more than 419 because many people listed multiple fields)* Big jump in percentage this year

Attendance (2)

• 34 countries

Argentina Australia Austria Brazil Canada China Denmark Finland France Germany Greece Hong Kong

Iceland India Ireland Israel Italy Japan Kenya Kosovo Kuwait Mexico Nepal

Netherlands New **Zealand** Pakistan Poland Singapore South Korea Sweden Switzerland Taiwan Turkey United Kingdom

Program Notes

- Buffet Dinner/Poster Session, Tuesday, Stata "Street"
- "Birds of a Feather" lunch Tuesday

Aviation/Defense (Room 32-144)	
Automotive (Room 32-124)	
Security	
Education/Training	
System Safety	
Medical/Healthcare/Pharma	
Oil and Gas/Chemicals	
Energy/Nuclear	
Rail/Transportation	
Ships/Marine	
Software	

Some Advances Since Last Year

- STPA Handbook (Thomas and Leveson)
 - 18,000+ downloads so far
 - (Japanese version) 3,270 downloads
 - Korean and Chinese versions are being created
- CAST Handbook (Leveson) will be ready in two months
- Integration of STPA into industry standards (Auto, Aviation, Defense)
- STAMP meeting in Japan (third year, almost 300 attendees)
- STAMP meeting in Europe (Finland in September)
- Int. System Safety Society Conference (Norfolk, VA July 29-Aug. 2): STAMP track, tutorials, panels (submit abstracts)

Theses and Dissertations

- Jeremiah Robertson, "System Theoretic Process Analysis Applied to Manned-Unmanned Teaming of Air Vehicles", January 2019
- John Rising, "Safety-Guided Design and Analysis of Space Launch Vehicles," June 2018 (Published in Journal of Space Safety Engineering, Elsevier)



Theses and Research Projects (in Progress)

- Lt. Col. Diogo Silva Castilho: Airline Safety Management Systems
- Lawrence Wong: A Systems Approach to Hospital Patient Safety (Dana Farber Cancer Institute)
- 2Lt. Dylan Muramoto: Improving the Air Force Acquisitions Process
- Safety and Security for Autonomous Vehicles
- Hazard Analysis for AI Systems
- Safety and Security in Complex Defense Systems (Net-Centric Warfare)



Leveson White Papers

- Improving the Standard Risk Matrix: Part 1
- An Engineering Perspective on Avoiding Inadvertent Nuclear War (Workshop on NC³)

In Progress:

- Hazard Analysis for a "System of Systems"
- Improving the Standard Risk Matrix: Part 2
- Using STPA to Generate a System Architecture
- Generating a CONOPS using STPA
- Learning More from Accidents and Incidents
- Generating Causal Scenarios in STPA
- Safety 3
- A Systems Approach to Occupational/Workplace Safety