

SWISSED18 is our fifth consecutive annual Systems Engineering symposium. This is no small matter for us at the SSSE, which is why we've invited back many key note speakers from the past four years. This as such, is the theme of our conference! The accidental theme of this year's conference – as no guidelines were provided to our presenters – is applying Systems Engineering / Thinking to solving / managing complex problems, which given the technological challenges of today's world eg. IoT, Digitalisation etc is perfectly understandable. Read further to discover additional insights into this year's event.

When we first made the leap of faith into the unknown and decided to put our energy into hosting SWISSED14, there was one person in particular who gave us a huge support by allowing us to host the conference at the ETH. This was of course Prof Dr Hans R Heinemann, it is a great honor for us several years later to commence our conference with his presentation entitled, "*Resilience – engineering systems for the unexpected*". How can we engineer reliable complex systems of systems in today's incredibly connected world, join us to find out more!

We were privileged when hosting SWISSED14 that two British Professors in Systems Engineering – noting that there are very few Systems Engineering Professors in the World – promptly accepted our invitation to present as our key note presenters. Although Professor Patrick Godfrey is now retired and investing much of his time writing books and creating novel websites, he has again agreed to support our event. He'll be presenting a topic that will certainly be attractive to the traditional Systems Thinkers in the audience namely, "*Using Systems Thinking to address complex engineering challenges.*" Following this presentation is Professor Michael Henshaw – the Programme Director of the MSc. for Advanced Systems Engineering at The University of Loughborough – presenting, "*Systems Engineering for Quantum Technologies*". The thought of applying Systems Engineering to the exploitation of quantum superposition and entanglement will surely attract the many Systems Engineers with backgrounds in Physics and such subjects.

For many years we were trying to persuade Professor Oli de Weck to present at SWISSED, as a Swiss national based at MIT with many published papers on Systems Engineering, we knew he would add huge value to our conference and indeed he did, when he presented at SWISSED16 and told us then about the proposal for Universal laws of Systems. We're very pleased that – even now whilst seconded to Airbus as a CTO – he will be joining us again and presenting, "*The First Law of Systems: Conservation of Complexity*".

At the start of SWISSED15, Tim Weilkins announced that, "*Requirements engineering is dead*". Fortunately, this somewhat provocative statement didn't lead to our loyal Requirements Engineers rioting! As Tim went through his well-prepared slides, it was clear that there was a much bigger story behind this statement. As a leader in Agile, SysML, MBSE and much more, Tim brings a vast experience and unique expert outlook on the leading edge of Systems Engineering. This year he'll be presenting, "*The Craft of Systems Engineering*" explaining why Systems Engineering is so much more than just processes and tools.

When Professor Larry Leifer presented at SWISSED15 the response of the audience was one of euphoria! This surely is not uncommon with his humble, energetic and highly entertaining presenting style. Larry joins us this year to present, "*Dancing with Disaster*". When Dancing with Disaster, how might Systems ameliorate disaster? How might the design of products deliver services? For whom and when? We're confident that he'll provide well considered answers to these questions and much more.

We're humbled that Professor Dave Snowden will present for the second consecutive year on the subject of, "*Complexity and Ambiguity*". This could well simply be a continuation of his SWISSED17 presentation that the audience found so startling, none of us really wanted it to end.

For our final presentation, Professor Joseph Kasser who also presented at SWISSED17 and will again journey from Australia to attend our event, will be presenting the perfect – yet accidental – final topic of the day!! Given that we will have been informed of the many benefits of Systems Thinking throughout the day, we'll round off our fifth conference with, "*The Top Three Systems Thinking Tools for Solving Complex Problems*".

The detailed abstracts of the above presentations will be uploaded to the SSSE website in the next few weeks, hopefully there are adequate insights provided above to persuade you – and your interested Colleagues – to join us for a light-hearted day dedicated to a subject that has ultimately become a living passion for many of us.

We're very much looking forward to meeting you at SWISSED18.

**Mike Johnson**

SWISSED organizer