



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Federal Department of Defence, Civil
Protection and Sport DDPS
armasuisse
Science and Technology

DEFTECH Defence Future Technologies Conference & Exhibition

Swarming & Machine Teaming

"Quantity has a quality all of its own."

2018
November 21st

THUN - SWITZERLAND





PROGRAM

- 09:00 Introduction**
Thomas Rothacher, armasuisse S+T
- 09:10 DEFTECH & human teaming**
Quentin Ladetto, armasuisse S+T
- 09:15 Swiss Drones and Robotics Centre**
Markus Höpfinger, armasuisse S+T
- 09:25 Autonomous systems and underlying technologies, the state of play**
Vincent Boulanin, Stockholm International Peace Research Institute (SIPRI)
- 10:00 MUM-T and swarming:
possibilities and challenges in military applications**
Martin Hagström, FOI - Swedish Defence Research Agency
- 10:30 Presentation of the exhibition & Coffee Break**
- 11:00 Lifelong learning in swarm robotics**
Nicolas Bredeche, Université Pierre et Marie Curie (UPMC)
- 11:30 Swarming and the evolution of military strategy:
consequences for international stability**
Jean-Marc Rickli, Geneva Center for Security Policy (GCSP)
- 12:00 Swarming technology:
implications for international discussions on
autonomy and human control in weapon systems**
George Woodhams, UN Institute for Disarmament Research
- 12:30 Lunch Break & Exhibition**
- 14:00 Towards Sensor-Based Drone Swarms**
Dario Floreano, Swiss Federal Institute of Technology (EPFL)
- 14:30 Multiple drones, robots and humans teaming**
Alessandro Giusti, Dalle Molle Institute for Artificial Intelligence (IDSIA)
- 15:00 Challenges and possible approaches for swarming
in future air operations**
Georg Dietz, IABG mbH
- 15:30 Coffee Break & Exhibition**
- 16:00 Swarming for next generation defence systems**
Marco Detratti, European Defence Agency (EDA)
- 16:30 'Where are you?' Sharing Compact Visual Maps
in Robot Teams in Unknown Environments**
Titus Cieslewski, University of Zurich (UZH)
- 17:00 End of the event**
Quentin Ladetto, armasuisse S+T

Registration and venue

Participation

The number of participants is limited.
There is no participation fee.

Registration

Mandatory
<https://deftech.ch/register>

Deadline

7th November 2018

Address

armasuisse S+T
Feuerwerkerstrasse 39
3602 Thun, Switzerland

Organizers

This event is an initiative of the Technology Foresight research program from armasuisse Science and Technology. Its goal is to anticipate and understand the emerging and disruptive technologies which might have implications for the military in general and the Swiss Armed Forces in particular.

