

67th Meeting of IFIP Working Group 10.4 on Dependable Computing and Fault Tolerance

Tortworth, Bristol, UK; January 22-26, 2015

Program

Thursday, January 22

19:00 *Welcome reception*

Friday, January 23

8:30 Introduction to the meeting
Paulo Verissimo (University of Luxembourg)

Workshop on the Science of Cyber-Security

Chair: Roy Maxion (with generous help from Tom Anderson and Paulo Verissimo)

8:45 Introduction to the workshop
Roy Maxion (Carnegie Mellon University)

Session 1 Moderator/rapporteur: Aad van Moorsel (Newcastle University, UK)

9:00 **What does it mean to do science, and are we doing it?**
John McHugh (University of North Carolina and RedJack, Inc.)

9:45 **An exercise in applying junk-science criteria to fuzz testing**
Phil Koopman (Carnegie Mellon University)

10:30 Discussion

10:45 **Coffee break**

Session 2 Moderator/rapporteur: Walt Heimerdinger (Honeywell Labs – retired)

11:15 **Reliability and reproducibility in cyber security research**
Victoria Stodden (University of Illinois)

12:00 **Are we asking the right questions?
Great science needs to relate to today's problems**
Susan Appleby (GCHQ, UK)

12:45 Discussion

13:00 **Lunch**

15:30 **Coffee break**

Session 3 Moderator/rapporteur: Chris Walter (WW Technology Group)

16:00 **Perspectives on security as an empirical science**
Vern Paxson (University of California, Berkeley)

16:45 **Structure as an aid to good science**
Roy Maxion (Carnegie Mellon University)

17:30 Discussion

18:00 **End of meeting day 1**

Saturday, January 24

Session 4 Moderator/rapporteur: Robert Stroud (Adelard)

8:30 **In Pursuit of Asymmetric Resilience: Applying Science Practices to Cybersecurity**

Nick Multari (Pacific Northwest National Lab, US)

9:15 **From infrastructure to science**

Laura Tinnel (SRI, US)

10:00 Discussion

10:15 **Coffee break**

Session 5 Moderator/rapporteur: Peter Ryan (University of Luxembourg)

10:45 **Avoiding pseudoscience in the science of security: a case study of malware analysis**

Jonathan Spring (CERT/Software Engineering Institute, CMU)

11:30 **How did we get into this mess, and how will we get out?**

Sami Saydjari / Shing-hon Lau (Cyber Defense Agency/Carnegie Mellon)

12:15 Discussion

12:30 **Lunch**

14:30 **Coffee Break**

Session 6 Rapporteurs/Chair

15:00 Workshop wrap-up

15:50 **End of workshop**

WG Business meeting

16:00 IFIP Working Group 10.4 business meeting

17:30 **End of meeting day 2**

Workshop banquet on board S.S. Great Britain

18:15 Coach departs from hotel

Sunday, January 25

10:00 **Excursion to Bath**

19:00 **Evening dinner** (at hotel)

to commemorate the 255th birthday of the Scottish poet Robert Burns

Monday, January 26

8:30 Research Reports (on-site enrollment)

10:00 **Coffee Break**

10:30 Research Reports (continued)

12:00 **Lunch**

13:30 **End of meeting**