

The National Academies of
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Forum on Cyber Resilience - Symposium

Beyond Spectre: Confronting New Technical and Policy Challenges

Keck Center of the National Academies, 500 Fifth St, NW, Washington, D.C. - October 3, 2018

Please note: This meeting is being audio-recorded and a summary of attributed presentations and discussions will be prepared and published by the National Academies as a workshop summary report.

8:30 – Welcome and Context-Setting – **Fred Schneider**, *Chair, Forum on Cyber Resilience*

9:00 – Keynote – **Paul Kocher**, *Forum on Cyber Resilience*

10:00 – Break

10:30 – Hardware and Software Engineering Assumptions at Risk

Moderator: **John Manferdelli**, *Forum on Cyber Resilience*

Session goal: Explore future chip design and performance trade-offs with security, implications of decreasing performance, effects on software engineering and compiler design assumptions, possible responses to Spectre and similar vulnerabilities.

Ernie Brickell

Galen Hunt, Microsoft

Andrew Myers, Cornell University

12:15 Lunch break

1:15 – Implications for Cloud Services & Isolation

Moderator: **Eric Grosse**, *Forum on Cyber Resilience*

Session goal: Explore challenges of current cloud architecture and isolation assumptions post-Spectre; importance of hardware isolation capabilities on shared infrastructure; practical implications of emerging side-channel risks and comparisons/trade-offs with other known vulnerabilities.

Brandon Baker, Google

Mark Ryland, Amazon

2:30 – Break

3:00 – International Implications, National Security, and Vulnerability Disclosure

Moderator: **Steve Lipner**, *Forum on Cyber Resilience*

Session goal: Explore complicated global landscape regarding vulnerability disclosure – how, when, who, why; complex space of trade-offs; provide rich picture of future challenges.

Ari Schwartz, Venable, LLP

Audrey Plonk, Intel

Katie Mousouris, Luta Security

Paul Waller, National Cyber Security Centre, United Kingdom

4:45 – Plenary Wrap-up & Q&A – Moderator: **Fred Schneider**

5:30 – Reception

Please note: Affiliations are for identification purposes only; unless noted, speakers are speaking for themselves and not for any institutions with which they may be affiliated.