

# Female Scientists Lecture Series

Lecture by Prof. Dr. Verena Zimmermann



TECHNISCHE  
UNIVERSITÄT  
DARMSTADT

“Humans as the  
weakest link? –  
Rethinking the role  
of humans in  
cybersecurity”



Prof. Dr. Verena Zimmermann  
(Assistant Professor for Security,  
Privacy and Society STB G 19 ETH  
Zurich)

14.02.2023  
10:30 at TU  
Darmstadt,  
Old Main Building  
(S1 | 03), Basement,  
R.08



Privacy and Trust  
for Mobile Users

**DFG** Deutsche  
Forschungsgemeinschaft

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**Prof. Dr. Verena Zimmermann**

**(Assistant Professor for Security, Privacy and Society STB G 19 ETH Zurich):**

**“Humans as the weakest link? – Rethinking the role of humans in cybersecurity”**

The role of the human for security and privacy is highly relevant, e.g., when it comes to secure authentication, communication, or the detection of phishing e-mails. As such, the human is an important element in today’s security-critical systems. Yet, humans have often been considered a weak link as it is finally them who create weak passwords or click on phishing links. Measures to prevent these insecure behaviours include automation, training or the creation of policies. But why do users behave insecurely in the first place? And how can we change that?

This talk on the one hand briefly describes research related to these questions that formed the basis for Verena Zimmermann's dissertation on secure and usable authentication. It will also outline a mindset that suggests to go even one step further: Rather than only viewing the human as a weak link to be dealt with, the mindset suggests to view the human as potential solution with regards to security and privacy. The talk will discuss ideas and challenges for this change in perspective and for enabling the human to be an active contributor to security.

On the other hand, the talk will provide insights on Verena Zimmermann's way through academia and provide insights on challenges faced that are closely related to the human-centered research and its interdisciplinary nature.

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## Short Bio:

Verena Zimmermann is Assistant Professor (Tenure Track) for Security, Privacy and Society at ETH Zürich. Her research interests comprise the Human Aspects of Safety, IT Security and Privacy. After her studies in psychology, she has completed her dissertation in the interdisciplinary research area of Usable Security at TU Darmstadt in Germany. Within the research group Work and Engineering Psychology and ATHENE, the German National Center for Applied Cybersecurity, she worked on several security-related research projects. The topics ranged from usable authentication over privacy-friendly smart home concepts and the human-centered design of hand-over tasks in smart cars to addressing security challenges in smart cities. Her dissertation with the title «From the Quest to Replace Passwords towards Supporting Secure and Usable Password Creation” received two dissertation awards by the German Association for Data Protection and Data Security e.V. (GDD) and the Ernst-Ludwigs-Hochschulgesellschaft.

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