

Invited Talk – RoSI lecture series

Winfried Kühnhauser, TU Ilmenau

Monday, 3. December 2018, **13:00**, APB 3105

Title:

On Proving Operating System Security

Abstract:

Reasoning about security properties of operating systems is not an easy task. Huge state spaces, undecidability problems, weak formalization, fuzzy TCB perimeters and software architectures that find it hard to guarantee code tamperproofness render validation efforts a task with many interlocked efforts.

This talk focusses on model-based analysis of real-world operating system security policies. Huge state spaces and undecidability problems are tackled by heuristic-based analysis approaches that trade accuracy for tractability, resulting in valuable hints to fundamental flaws in a systems' security policies.

CV:

Winfried E. Kühnhauser received his Diploma degree in Computer Science from the University of Dortmund (Germany) and holds a Ph.D. from the Technical University of Darmstadt. Prior to joining the Technical University of Ilmenau he was an assistant professor at the University of Dortmund, a senior research fellow at the German National Research Center for Computer Science / Fraunhofer Institute and a visiting professor at the universities of Klagenfurt (Austria) and Ilmenau (Germany).

Today Dr. Kühnhauser is full professor and head of the Computer Science Institute at Ilmenau, and chair of the Distributed Systems and Operating Systems group.