



Fault Diagnoses and Tolerance in Cryptography 2024

Fabrizio De Santis¹ Francesco Regazzoni²

¹Siemens, Germany ²Univ. of Amsterdam & UniSI, The Netherlands & Switzerland

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- **General:** Michael Tunstall
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Submitted Papers

- 9 papers submitted
- reviewed by PC members and additional reviewers
- most papers received 3 reviews

Accepted Papers

- 5 regular papers (around 55%)
- 2 short papers (around 22%)

Proceedings

- paper URL: <https://conferences.computer.org/fdtcpub24>
- login: fdtcpub24 (to be closed few days after FDTC)
- password: conf24// (please include also the two slashes)

The proceedings will be published by [CPS](#) (on IEEExplore).

Invited Talks

- ***Persistent Fault Analysis: The Persistent Threat***

- *Shivam Bhasin*
- Temasek Lab & Nanyang University



- ***Fault Tolerance of Encrypted Memory: Crash Consistency Problem and Secure Recovery***

- *Rei Ueno*
- University of Kyoto



Program Schedule



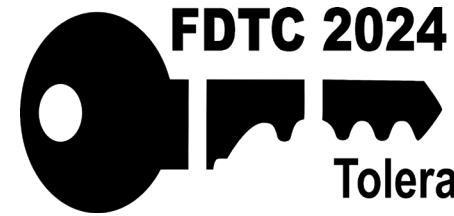
09:30 – 09:40 Welcome and Opening remarks

Keynote I

Chair: Francesco Regazzoni

09:40 – 10:30 Persistent Fault Analysis: The Persistent Threat
Shivam Bhasin

10:30 – 11:00 Coffee Break



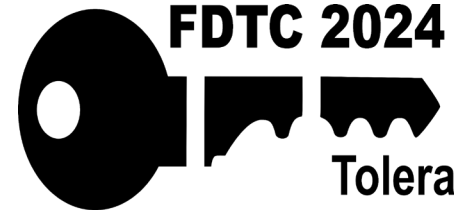
FDTC 2024

**Fault Diagnosis and
Tolerance in Cryptography**

Session 1 – FAULT ATTACKS ON SW AND HW DEVICES

Chair: Victor Lomné

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|---------------|---|
| 11:00 – 11:30 | A single-trace fault injection attack on hedged module lattice digital signature algorithm (ML-DSA)
<i>Sönke Jendral</i> , <i>John Preuß Mattsson and Elena Dubrova</i> |
| 11:30 – 12:00 | Fault injection attacks exploiting high voltage pulsing over Si-substrate backside of IC chips
<i>Yusuke Hayashi</i> , <i>Rikuu Hasegawa, Takuya Wadatsumi, Kazuki Monta, Takuji Miki and Makoto Nagata</i> |
| 12:00 – 12:30 | Improving CPU fault injection simulations: insights from RTL to instruction-level models
<i>Jasper van Woudenberg</i> , <i>Rajesh Velegalati, Cees-Bart Breunese and Dennis Vermoen</i> |
| 12:30 – 13:30 | Lunch |



Fault Diagnosis and
Tolerance in Cryptography

Keynote II

Chair: Makoto Nagata

13:30 – 14:20

Fault Tolerance of Encrypted Memory: Crash Consistency
Problem and Secure Recovery

Rei Ueno

***Session 2 – FAULT ATTACK MODELS AND
COUNTERMEASURE (short papers)***

Chair: Wieland Fischer

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|---------------|--|
| 14:20 – 14:40 | Switch-glitch - location of fault injection sweet spots by electromagnetic emanation
Matthias Probst , Michael Gruber, Manuel Brosch, Tim Music and Georg Sigl |
| 14:40 – 15:00 | MAYo or MAY-not: exploring implementation security of the post-quantum signature scheme MAYO against physical attacks
Thomas Aulbach, Soundes Marzougui, Vincent Quentin Uitzsch and Jean-Pierre Seifert |
| 15:00 – 15:30 | Coffee Break |

Session 3 – Fault Injection Analysis and Tools

Chair: Rei Ueno

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|---------------|--|
| 15:30 – 16:00 | FaultyGarble: fault attack on secure multiparty neural network inference
<i>Mohammad Hashemi, Dev Mehta, Kyle Mitard, Shahin Tajik and Fatemeh Ganji</i> |
| 16:00 – 15:30 | PoP DRAM: a new EMFI approach based on EM-induced glitches on SoC
<i>Clément Fanjas, Simon Pontié, Driss Aboukassimi and Jessy Clédierè</i> |
| 16:30 – 16:45 | Closing remarks and Farewell |

Congratulations to all the Authors
Wishing you a wonderful FDTC 2024!