

Activity: 2025 Women in Information and Coding Theory Workshop (WICT)*

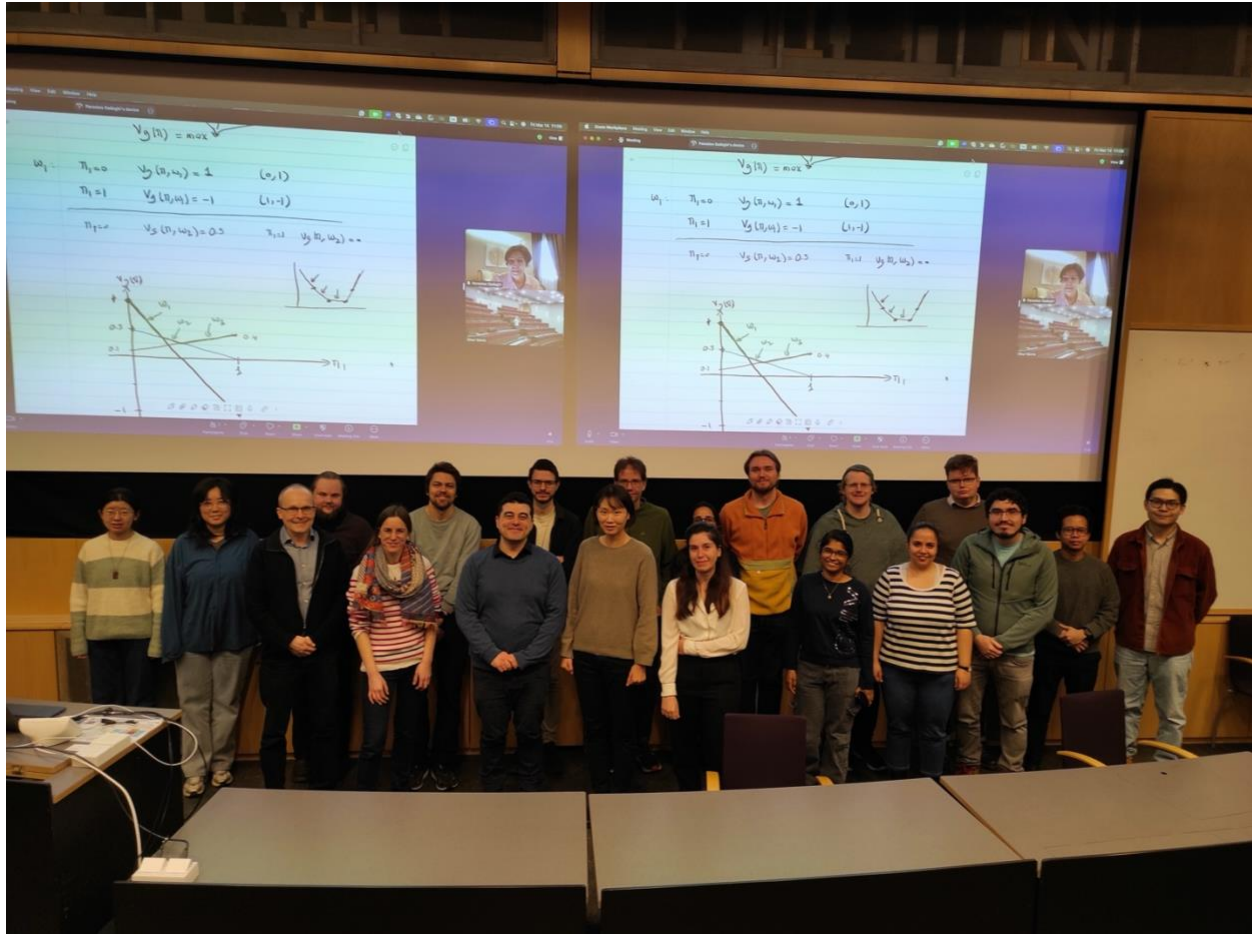
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Abstract

On 13–14 March 2025, we organized the **Women in Information and Coding Theory Workshop (WICT)** in the Ada Lovelace seminar room at Linköping University, Sweden. Five internationally renowned female scholars delivered in-depth tutorials spanning learning-based coding, distributed compression, privacy-preserving data use and physical-layer security. The event, made possible through **ELLIIT Gender & Diversity** funding, gathered researchers and students from Swedish and international universities, offering both technical insights and powerful role-model exposure. The two-day format combined tutorials, networking fika, a student-pitch session and an informal dinner, creating an inclusive environment that fostered new collaborations and highlighted pathways for women in Information Theory.



*This event was partially funded by the **ELLIIT Gender and Diversity Programme**.



Gender & Diversity Focus

The workshop purposefully showcased leading **female** researchers as tutorial speakers, providing visible role models and mentoring opportunities for early-career participants. Outreach targeted master's and PhD programmes across Sweden, and registration was free to remove financial barriers. These design choices align with the goals of promoting gender equality in STEM by introducing female role models and building sustainable networks across ELLIIT partner universities.

Programme Highlights

- **Elsa Dupraz** (IMT Atlantique, France): Learning over Compressed Data: From Information Theory to Practical Code Design
- **Elza Erkip** (NYU Tandon School of Engineering, U.S.A.): Distributed Compression in the Era of Machine Learning
- **Si-Hyeon Lee** (KAIST, South Korea): Privacy-Preserving Data Utilisation with Differential Privacy
- **Parastoo Sadeghi** (UNSW Canberra, Australia): An Introduction to the Science and Applications of Quantitative Information Flow (QIF)
- **Linda Senigagliaesi** (ENSEA, France): Fundamentals and Emerging Trends in Physical-Layer Security and Authentication

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Expected Results & Impact

1. **Research collaborations** – follow-up joint papers are planned between LiU, LU and the tutorial speakers, leveraging contacts established during WICT.
2. **Visibility & outreach** – workshop materials were shared via different channels, extending reach beyond the on-site attendees.
3. **Community building** – the WICT mailing list will remain active for announcing future Nordic women-in-IT events, sustaining the momentum generated.