Topics

Day 1

- ☐ **Cryptography:** introduction and state of the art for symmetric-key and public-key cryptography, hash functions and MAC algorithms
- ☐ **Cyber Security:** introduction to computer security, design principles

Day 2

- ☐ **Cryptography:** fully homorphic encryption, authentication methods
- ☐ **Cyber Security:** wireless security, PKI
- ☐ **Advanced Topics:** eDocuments hands-on, advanced authentication

Day 3

- ☐ **Recent developments:** bitcoin, eID security, eVoting, software security, mobile payments, android, standardisation

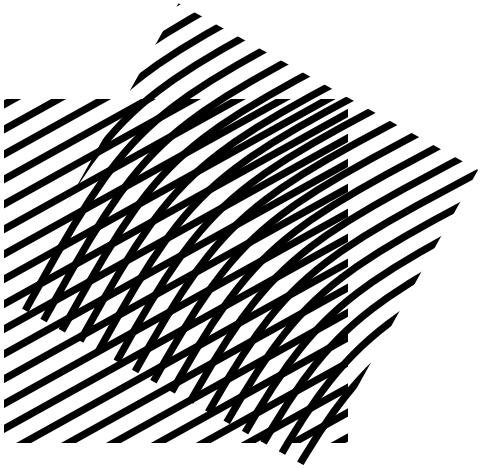
Day 4

- ☐ **Applications:** secure hardware, side-channel attacks (with hands-on) & countermeasures, FPGA, privacy technologies
- ☐ **Regulations:** legal perspective on privacy and security

List of Speakers

- ☐ Josep Balash (KU Leuven, Belgium)
- ☐ Lejla Batina (Radboud University Nijmegen, The Netherlands)
- ☐ Danny De Cock (KU Leuven, Belgium)
- ☐ Marijke De Soete (Security4Biz, Belgium)
- ☐ Claudia Diaz (KU Leuven, Belgium)
- ☐ Walter Fumy (Bundesdruckerei, Germany)
- ☐ Jens Hermans (KU Leuven, Belgium)
- ☐ Nele Mentens (KU Leuven, Belgium)
- ☐ Roel Peeters (KU Leuven, Belgium)
- ☐ Olivier Pereira (UCL, Belgium)
- ☐ Frank Piessens (KU Leuven, Belgium)
- ☐ Bart Preneel (KU Leuven, Belgium)
- ☐ Vincent Rijmen (KU Leuven, Belgium)
- ☐ Vladimir Rozic (KU Leuven, Belgium)
- ☐ Stefaan Seys (KU Leuven, Belgium)
- ☐ Dave Singelée (KU Leuven, Belgium)
- ☐ Francois-Xavier Standaert (UCL, Belgium)
- ☐ Paul van Oorschot (Carleton University, Canada)
- ☐ Patrick Van Eecke (Universiteit Antwerpen, Belgium)
- ☐ Ingrid Verbauwhede (KU Leuven, Belgium)
- ☐ Frederik Vercauteren (KU Leuven, Belgium)

15th International Course on Cyber Security and Cryptography



15 – 18 June 2015
Heverlee, Belgium

KU LEUVEN

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https://www.cosic.esat.kuleuven.be/course

Background

Our society becomes more and more connected. This fundamentally changes our way of interacting as individuals and organisations. However, before our digital society can become truly ubiquitous, an important challenge lies ahead: there is a lack of trust and confidence, fueled by incidents such as viruses, phising attacks and hacks that often result in sensitive data being leaked.

During the past decade, rapid progress has been made in the field of cryptography and cyber security. Sometimes, this rapid progress resulted in key decisions being based on outdated information, unsubstantiated rumors or the latest hypes. It is very important in this area to understand the basic concepts and principles and to keep up to date with the latest technology developments presented by experts.

Course Secretariat and Info

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Content

This course is composed using the expertise accumulated in COSIC over more than twenty years of activity in the areas of practical and theoretical cryptography and cyber security. The program is unique in its broad coverage of both foundations and applications. It continuously evolves based on feedback from the participants of the previous thirteen editions. Every course introduces several new topics to take into account the recent technical and legal developments. The subjects are discussed by international experts in the field, who are involved in the design, implementation and management of cyber security.

Targeted Audience

The course addresses people at a technical level who are responsible for information systems. Prior background knowledge on information security is not required. The program is particularly targeted towards those involved with cyber security in financial institutions, insurance companies, large organisations and governments. Also postgraduate students who want to learn about information security in practice, will benefit from this course.

General Information

The course runs from Monday, June 15th to Thursday, June 18th, 2015.

☐ Full registration fee	1000€
☐ Academic fee	400€
☐ Full-time student fee*	200€

This fee includes handouts, additional documentation, lunches, coffee and participation in the course banquet.

Payment can be made by credit card (only VISA and MasterCard are accepted).

Please register at :

https://www.cosic.esat.kuleuven.be/course

After the 31rd of May 2013, online registration is no longer possible and late registration fees apply:

☐ Full registration fee	1200€
☐ Academic fee	500€
☐ Full-time student fee*	300€

* Full-time student fee does not lunches and the course banquet.