

### **ECRYPT II** Sponsored by the ECRYPT **Network of Excellence**



## - Workshop on Lightweight Cryptography 2011 -

November 28-29, 2011, Louvain-la-Neuve, Belgium.

# - Call for Papers -

The focus of the workshop is on all aspects related to low-cost cryptography, mixing symmetric and asymmetric techniques, algorithms and protocols, as well as hardware and software implementation issues. The workshop is a forum for presenting new solutions for securing small embedded devices (such as smart cards, RFIDs, sensor nodes, ...), including their underlying mathematical foundations and practical applications. Topics of interest include:

- Low cost symmetric cryptographic primitives (block/stream ciphers, hash functions).
- Public key cryptography fitting the constraints of smart cards and RFIDs.
- Cryptanalysis of emerging (secret and public key) cryptographic primitives.
- Lightweight authentication protocols and their security analysis.
- Low-cost key distribution mechanisms in sensor networks.
- *Efficient multi-purpose designs* (e.g. encryption + hashing + authentication).
- Benchmarking of lightweight cryptographic algorithms in software and hardware.
- Implementation attacks and countermeasures for constrained devices.
- Random number generation and physically unclonable functions.
- Exploitation of new low power micro-/nano-electronic technologies.
- Industrial applications (e.g. automotive industry, smart metering in buildings, ...).
- Privacy issues raised by the proliferation of embedded cryptography.

#### Important dates.

Submission deadline: October 10, 2011. Notification of acceptance: November 7, 2011. Final version due: November 15, 2011. Registration deadline: November 15, 2011.

#### Instructions for authors.

Authors are invited to submit their papers via electronic submission. Contributions should describe technical works related to the workshop topics. Papers must be at most 18 pages (excluding the bibliography and appendices), and be formatted according to the Springer Lecture Notes in Computer Science style (see <a href="http://www.springer.de/comp/lncs/author.html">http://www.springer.de/comp/lncs/author.html</a>). The workshop will not have formal proceedings. Therefore, accepted papers can be re-submitted to other conferences or journals without risking infringing double-submission policies.