

A Fiches enseignants-chercheurs

A.1 Catuscia Palamidessi

Statut : DR Section du CNU : 27 HDR : Oui
Établissement : INRIA et Ecole Polytechnique
Laboratoire : Futurs et Laboratoire d'Informatique de l'X (LIX)
Équipe : Comète

Thèmes de recherche

- Theory of Concurrency.
- Security.
- Automatic verification (in particular, model checking).
- Probabilistic systems.

Publications les plus significatives

- [1] K. Chatzikokolakis, C. Palamidessi, and P. Panangaden. Anonymity protocols as noisy channels. *Information and Computation*, 2007. To appear. The report version is available at www.lix.polytechnique.fr/~catuscia/papers/Anonymity/Channels/full.pdf.
- [2] K. Chatzikokolakis, C. Palamidessi, and P. Panangaden. Probability of error in information-hiding protocols. In *Proceedings of the 20th IEEE Computer Security Foundations Symposium (CSF20)*, pages 341–354. IEEE Computer Society, 2007.
- [3] C. Palamidessi, V. A. Saraswat, F. D. Valencia, and B. Victor. On the expressiveness of linearity vs persistence in the asynchronous pi-calculus. In *Proceedings of the Twenty First Annual IEEE Symposium on Logic in Computer Science (LICS)*, pages 59–68. IEEE Computer Society, 2006.
- [4] C. Palamidessi and O. M. Herescu. A randomized encoding of the π -calculus with mixed choice. *Theoretical Computer Science*, 335(2-3) :373–404, 2005.
- [5] C. Palamidessi. Comparing the expressive power of the synchronous and the asynchronous pi-calculus. *Mathematical Structures in Computer Science*, 13(5) :685–719, 2003.

Responsabilités pédagogiques, administratives, animation de la recherche

- Director of the INRIA Equipe Comète
- Member of
 - The Council of the EATCS (European Association of Theoretical Computer Science)
 - The IFIP Technical Committee 1 – Foundations of Computer Science.
 - The IFIP Working Group 2.2
- Member of the Editorial Board of
 - *Mathematical Structures in Computer Science*, Cambridge University Press.
 - *Theory and Practice of Logic Programming*, Cambridge University Press.
 - *Electronic Notes of Theoretical Computer Science*, Elsevier Science.

Doctorants encadrés depuis 2002

- Oltea Michaela Herescu, *The Probabilistic Asynchronous π -calculus*, soutenance novembre 2002.

- Konstantinos Chatzikokolakis, *Probabilistic and Information-Theoretic Approaches to Anonymity*, soutenance octobre 2007.
- Romain Beauxis, *Asynchronous Processes for Security*, début en novembre 2005.
- Sylvain Pradalier, *Stochastic Process Calculi and applications to Bioinformatics*, début en mai 2006. Thèse co-encadrée avec Cosimo Laneve, University of Bologna.
- Carlos Olarte, *Probabilistic Concurrent Constraints and applications to Security*, début en septembre 2006. Thèse co-encadrée avec Frank Valencia, LIX.
- Jesus Aranda, *Expressiveness in Process Calculi*, début en septembre 2006. Thèse co-encadrée avec Frank Valencia, LIX and Juan Francisco Diaz, Universidad del Valle, Colombia.
- Christelle Braun, *An epistemological framework for Probabilistic Information Flow*, début en octobre 2007.