CURRICULUM VITÆ

Personal Information

Last Name: FERET   First Name: JÉRÔME
Citizenship: French   Gender: M
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DIPLOMAS

Ph. D. (2005):

- Ph. D. Thesis at the *Laboratoire d'Informatique de l'École Normale Supérieure*, *Analysis of mobile systems by Abstract Interpretation*, Ph. D. advisor: Patrick COUSOT; defended in February 2005.

Master's Degree (2000):

- Master's Degree in Pure and Applied Mathematics and in Computer Science at the École Normale Supérieure,

  Major: Abstract Interpretation, Mention: 'very good'.

CURRENT PROFESSIONAL STATUS

Current position: Research Fellow (CRHC)
Institution: INRIA Paris, France

Education

- 2000-2004: Ph. D. studies. Thesis at the *Laboratoire d'Informatique de l'École Normale Supérieure*, *Analysis of mobile systems by Abstract Interpretation*, Ph. D. advisor: Patrick COUSOT. Defended in February 2005;

- 1997-2000: Master's Degree in Pure and Applied Mathematics and in Computer Science
  Major: Abstract Interpretation, Mention: 'very good';

- 1997-2001: École Normale Supérieure.

Professional Experience

- Jan 2022 - present: Research Fellow (CRHC) at INRIA;

- Jan 2011 - Dec 2021: Research Fellow (CR1) at INRIA;

- Oct 2008 - Dec 2010: Research Fellow (CR2) at INRIA;

- Sep 2022 - present : Adjunct Professor at PSL University;

- May 2011 - present: Consultant for AbsInt Angewandte Informatik GmbH, Saarbruecken, Germany;

- Oct 2007 - Feb 2010: Consultant for Plectix BioSystems Inc., Cambridge, MA, USA;

- Oct 2007 - Sept 2008: Research Fellow at Harvard Medical School – static analysis of biological networks;

- Jun 2007 - Sept 2007: Developer and Systems Designer at Plectix BioSystems Inc., Cambridge, MA, USA (design and implementation of algorithms for trace minimization in biological networks);

- Jan 2005 - Dec 2007: Research Fellow at École Normale Supérieure – ASTRÉE project;

- Sept 2004 - Dec 2004: Research Fellow at École Polytechnique – ASTRÉE project;

- Sept 2001 - Aug 2004: Université Paris-Dauphine – teaching assistant during my graduate studies;

- Jan 1999 - Jan 2000: Laboratoire d'Informatique de l'École Polytechnique (Palaiseau, France) – intern (design and implementation of a static analyzer for the π-calculus);

- Sept 1997 - Aug 2001: École Normale Supérieure – civil servant (university student in the Grandes Écoles system).

Research visits and collaborations

- 2013, East China University and National University of Defense Technology (China);

- 2011, University of Bologna (Italy);

- 2011 - 2013, ETH Zürich (Switzerland);

- 2010, University of Cambridge (United Kingdom);

- 2009, École Polytechnique Fédérale de Lausanne (Switzerland);

- 2009, Seoul National University (Korea);

- 2007, Microsoft Research Redmond (WA, USA);

- 2006 - present, Harvard Medical School (MA, USA);

- 2005, Università degli Studi di Verona (Italy).

Awards and distinctions

- Best paper award of the *Sixth International Conference on Verification, Model Checking and Abstract Interpretation* (VMCAI'05);

- Best paper award of *AIAA Infotech@Aerospace 2010* (AIAA'10);

Projects coordination

- Site leader of the ANR project "DCore - Causal Debugging for Concurrent Systems" (March 2019–Feb 2023), coordinated by Gregor Gössler (INRIA Grenoble — Rhône-Alpes), 612 k€;

- Site leader in the ITMO Cancer project "TGFβSysBio" (Jan 2016–Dec 2019), coordinated by Nathalie Théret (Rennes 1, France), 420 k€;

- Consultant in the DARPA programme "Communicating with Computers" (July 2015–Jan 2019) (Team "Active Context", coordinated by Walter Fontana (Harvard Medical School)

- Principal investigator of the ANR project "AnaStaSec" (ANR, Jan 2015–Dec 2018, 756 k€);

- Site leader in the DARPA programme "Big Mecanisms") (July 2014–Jan 2018) (Team "Executable Knowledge", coordinated by Walter Fontana (Harvard Medical School), 2726 k\$);

- Coprincipal investigator (with Denis Thieffry) of the incitative action on automatic synthesis of qualitative models for intracellular signaling pathways from higher-level representation (ÉNS, Nov 2013-Oct 2014, 51 k€);

- Principal investigator of the Long-term Junior Chair of Excellence "AbstractCell" (ANR, Dec 2009-Dec 2013, $270x$ k€).

Publications (see attached list)

- author of one publication in an international peer-reviewed journal;

- coauthor of eleven publications in international peer-reviewed journals;

- author of eleven publications and talks in international peer-reviewed symposia;

- coauthor of thirty-eight publications in international peer-reviewed symposia;

- coauthor of one publication in a national peet-reviewed symposium;

- coauthor of five book chapters;

- author of two book chapters.

Invited talks

INVITED TALKS IN INTERNATIONAL CONFERENCES

- 2012: Invited speaker at the Systems Biology Europe symposium (SBE 2012), October 16–17, 2012, Madrid, Spain.

- 2011: Plenary invited speaker at the 18th International Static Analysis Symposium (SAS 2011), Sept 14–16, 2011, Venice, Italy;

- 2011: Plenary invited speaker at the 27th Conference on the Mathematical Foundations of Programming Semantics (MFPS 27), May 25–28, 2011, Pittsburg, USA;

- 2010: Special session invited speaker at the 26th Conference on the Mathematical Foundations of Programming Semantics (MFPS 26), May 6–10, 2010, Ottawa, Canada.

INVITED TALKS IN WORKSHOPS

- 2022: Invited speaker at the seminar *Computer Science Methods for Effective and Sustainable Simulation Studies*, Nov 03–07 2022, Dagstuhl, Germany.

- 2022: Talk at the *research group Computer Science and Mathematics (GdR IM)*, March 29-April 1 2022, Lille, France.

- 2016: Invited speaker at the workshop on *Verified Trustworthy Software Systems*, April 4-7 2016, Imperial College, London, UK.

- 2015: Short talk at the seminar *École normale supérieure - Institut Pasteur*, February 5 2015, École normale supérieure, France.

- 2015: Short talk at the workshop *Integrative Cell Models*, Lorentz center, January 26–30 2015, Leiden, the Netherland.

- 2014: Short talk at the seminar *Multiscale Spatial Computational Systems Biology*, November 23–28 2014, Dagstuhl, Germany.

- 2014: Invited speaker at the seminar *Next Generation Software Analysis Tools*, August 24–29 2014, Dagstuhl, Germany.

- 2014: Invited speaker at the workshop on *Logic and Systems Biology* (LSB 2014), July 13 2014, Vienna, Austria.

- 2013: Invited speaker at the workshop on *Analysis and Verification of Dependable Cyber Physical Software* (AVDCPS 2013), November 23–24 2013, Changsha, China.

- 2013: Invited speakser at the seminar *Critical Systems*, Captronic-Pegase, October 1st, Aix-en-Provence, France.

- 2013: Invited speaker at the seminar In'Tech, *Validation formelle des systèmes industriels critiques*, April 18, Grenoble, France.

- 2013: Invited speaker at workshop on *Modelisation, Optimisation, and Static Analysis*, January 7–11, 2013, Luminy, France.

- 2012: Invited speaker at the workshop *Information Flow and its Applications*, August 26–31, 2012, Schloss Dagstuhl, Dagstuhl, Germany.

- 2012: Invited speaker at the workshop on *Formal Methods in Systems Biology* (AFMSB 2012), July 7–8, 2012, Berkeley, USA.

- 2012: Invited speaker at the Workshop on *Theory of Probabilistic Systems*, April 2–5, 2012, Bellairs Institute, Barbados.

- 2012: Invited speaker at the Workshop on *Systems Biology and Formal Methods* (SBFM 2012), March 29–30, 2012, New York, USA.

- 2010: Plenary invited speaker at the 1st International Workshop on *Interactions between Computer Science and Biology* (CS2Bio 2010), June 10, 2010, Amsterdam, Netherlands.

- 2010: Invited speaker at the Workshop on *Computational Modelling of Biological Systems*, March 15–19, 2010, Bellairs Institute, Barbados.

INVITED TALKS IN LAB-MEETINGS

- In France: Semantics and Abstract Interpretation (ÉNS) (×3), the students of the *Department of Computer Sciences* of the ÉNS, "la demi-heure de science" (INRIA Paris-Rocquencourt), General seminar of the computer science department of the École normale supérieure (Paris), ANR BIOTEMPO (Paris) (×3), ANR SYNBIOTIC (Evry), CEA-LIST (Saclay), DIMNP (Montpellier), DYLISS (Rennes), INSTITUT CURIE (Paris), IRIF (UP), IRIT (Toulouse), LABRI (Bordeaux), LIAFA (Paris VII), LORIA (Nancy), PLUME (Lyon); PPS (Paris VII) (×4), SYMBIOSE (Rennes), VERIMAG (Grenoble) (×2), Concurrency working group (Paris VII) (×7),

  The video of my talk at "La demi-heure de science" is available on the following link:

  `http://www.canal-u.tv/video/inria/reduction_de_modeles_de_voies_de_signalisation_intracellulaire.17571`,

  the one at the general seminar of the computer science department of the École normale supérieure is available here:

  `http://savoirs.ens.fr/expose.php?id=2223`.

- Outside France: Formal Methods Group (Verona, Italy), Microsoft Research (Redmond, WA, USA), Department of Systems Biology of Harvard Medical School (×3) (Boston, MA, USA), Seoul National University (15 hours of lectures) (Seoul, South Korea), LANOS Working Group (EPFL, Lausanne, Switzerland), EPFL (Lausanne, Switzerland), Jena University (Jena, Germany), University of Cambridge (Cambridge, UK), Programming Methodology group at ETH Zürich (Zürich, Switzerland) (×2), Bison group at ETH Zürich (Zürich, Switzerland) (×3), University of Bologna (20 hours of lectures) (Bologna, Italy), Focus group at the University of Bologna (Bologna, Italy), IMDEA (Madrid, Spain).

Research organization

ORGANIZATION OF INTERNATIONAL SCIENTIFIC EVENTS

- Cochair of the programme committy of an international symposium:
  CMSB 2017.

- Cochair of the programme committees of five international workshops:
  SASB 2010–2013, SBFM 2012.

PARTICIPATION TO COMMITTEES

- Member of the expert committee of the *National Foundation of Research in Aeronautic and Spacial Applications* (FNRAE 2008);

- Member of the programme committees of seventeen international workshops and thirty two international conferences:

  APLAS 2011; BIOTECHNO 2012–2016; CMSB 2011, 2013, 2016, 2018-2022; CompMod 2013; CIBCB 2019; CS2Bio 2010–2011; DCM 2009,2014–2015; FHIES 2012; FMICS 2014; HSB 2019–2020; ICBEB 2013–2014; JOBIM 2017; LICS 2018; LOPSTR 2015-2016; SAS 2016, 2018, 2020, 2021, 2022; SASB 2014-2019; IFIP TCS 2014; TMPA 2017; VEMDP 2014, 2015, 2018; VMCAI 2014, 2019, 2020, 2023.

- External Reviewing Committee member of the *Fortieth ACM SIGPLAN-SIGACT Symposium on Principles of Programming Languages* (POPL 2013);

EDITORIAL BOARDS

- since 2013: Editorial board member of Open Journal of Modelling and Simulation;

- since 2011: Editorial board member of Frontiers in Genetics.

EDITORS OF SPECIAL ISSUES

- Coeditor with Cedric Lhoussaine of the special issue "Formal Method for Biological Systems Modelling", appeared in Computation. Volume 9. - MDPI 2021.

- Coeditor with Loïc Paulevé and David Safranek of the special issue "Formal Verification and Static Analysis of Molecular Devices and Biological Systems", appeared in Theoretical Computer Science. Volume 765, pp.169. - Elsevier 2019.

- Coeditor with Heinz Koeppl of the special issue "CMSB 2017" appeared in IEEE/ACM Transactions on Computational Biology and Bioinformatics. Volume 16(5), pp.1561-1619. - ACM 2019.

AD HOC REVIEWING ACTIVITY

- Reviewer for international conferences or international workshops:

  APLAS 2005–2006, 2015; ARSBM 2018; ASIAN 2006; CAV 2010, 2015, 2019–2020; CC 2006; CMSB 2007, 2012; CICB 2019; CompMod 2009; CONCUR 2004–2005, 2007–2008, 2010, 2015-2017; ECOOP 2013; EMSOFT 2015; ESOP 2000–2004, 2007, 2009–2013; FMICS 2009; FOSSACS 2003, 2007, 2009, 2015; HSCC 2012–2013; ICALP 2008, 2013, 2016; iFM 2019; LICS 2016–2017; MFCS 2011, 2020, 2021; MFPS 2008, 2009; PEPM 2009; PLDI 2006; POPL 2007–2010, 2015, 2023; PPDP 2000; SAC 2004; SAS 2001–2011; SEFM 2009; TACS 2001; VMCAI 2003–2005, 2007–2013, 2016–2017; VSTTE 2012.

- Reviewer for international journals:

  ACS Synthetic Biology 2018; Axioms 2014; Bioinformatics 2020; BMC Supplements 2022; BMC Systems Biology 2014; Formal Aspects of Computing 2013; Formal Methods in System Design 2017, 2022; Fundamenta Informaticæ 2009, 2019; IEEE Transactions on Reliability 2018; Information and Computation 2001, 2005, 2011, 2015; Information and Software Technology 2024; Journal on Applied Dynamical System 2018; Journal of Computer Science and Technology 2006; Journal of Computer Security 2007; Journal of Software 2007; Logical Methods in Computer Science 2012; Mathematical Structures in Computer Science 2011, 2022; Natural Computing 2018; PLOS Computational Biology; Science of Computer Programming 2015, 2022; Software: Practice and Experience 2014; Theoretical Computer Science 2009, 2010, 2011, 2012, 2013, 2015, 2016, 2017, 2018, 2019, 2020, 2023; Theory and Practice of Logic Programming 2012; Transactions on Computational Logic 2018; Transactions on Computational Biology and Bioinformatics 2017, 2018, 2019n, 2023; Transactions of Computational Systems Biology 2008; Transactions on Modeling and Computer Simulation 2014; Transactions on Programming Languages and Systems 2001, 2006, 2007, 2014.

- External Reviewer for the Microsoft Research European Ph. D. Scholarship program 2006, the ANR-white program 2010 and 2013, the ANR INS program 2013, the Swiss National Science Foundation's Merit Review Process 2014, the research program PRIM 2017 (funded by MIUR, the Italian Ministry for Education, University and Research), the research program PRIM 2021, the research program CORE (Luxembourg National Research Fund).

RECRUITING COMMITTEES

- 2022-2023: Member of the recruiting jury for junior research scientists (CRCN and ISFP) at INRIA Paris;

- 2022-2023: Member of the recruiting jury for junior research scientists (CRCN and ISFP) at INRIA Paris-Saclay;

- 2021-2022: Member of the recruiting jury for junior research scientists (CRCN and ISFP) at INRIA Paris-Saclay;

- 2021-2022: Chair of the recruiting committee for assistant professors at the University of Evry, May 2022;

- 2020-2021: Member of the recruiting jury for junior research scientists (CRCN and ISFP) at INRIA Paris-Saclay;

- 2017-2018: Member of a recruiting committee for assistant professors at the University Paris-Diderot, May 2018;

- 2016-2017: Member of a recruiting committee for assistant professors at the University of Evry, May 2017;

- 2015-2016: Member of a recruiting committee for assistant professors at the University Paris-Diderot, May 2016;

- 2014-2015: Member of the recruiting jury for junior research scientists (CR2) at INRIA Paris-Rocquencourt;

- 2011-2013: Member of three recruiting committees for assistant professors at the University of Lille 1, May 2011, May 2012, May 2013.

PH. D. JURIES

- Jury member of David Delmas's Ph. D. (Sorbonne University, December 2022).

- Reviewer of Samuel Pastva's Ph. D. (Masaryk University, Brno, Czech Republic, June 2022).

- Jury member of Julien Braine's Ph. D. (ENS-Lyon, May 2022).

- Jury member of Diane Gallois-Wong's Ph. D. (LRI, 2021).
  Actual position: Research Software Engineer at Nomadics Labs.

- Jury member of Andreea Beica's Ph. D. (ENS, May 2019).
  textbfActual position: Data Engineer ar Total.

- Jury member of Jean Coquet's Ph. D. (Inria Rennes – Bretagne Atlantique, December 2017).

- Jury member of Mounir Assaf's Ph. D. (Irisa, May 2015).

- Reviewer of Peter Kreyßig's Ph. D. (Friedrich-Schiller-Universität Jena, Germany, March 2015).

- Jury member of Arlen Cox' Ph. D. (University of Colorado, Boulder, USA & École normale supérieure, Paris, France, November 2014).

- Jury member of Geoffroy Andrieux' Ph. D. (Irisa, July 2013).
  Current position: Post-doctoral researcher at the Institute for Molecular Medicine and Cell Research in Freiburg, Germany.

- Reviewer of Tatjana Petrov's Ph. D. (ETH Zürich, June 2013).
  Current position: Post-doctoral researcher at IST Vienna, Austria.

- Reviewer of Vincent Noël's Ph. D. (University of Rennes 1, December 2012).
  Current position: Post-doctoral researcher at Butantan Institute, São Paulo, Brasil.

- Jury member of Loïc Paulevé's Ph. D. (École Centrale Nantes, Octobre 2011).
  Current position: Junior researcher at CNRS, University Paris-South, France

- Jury member of Sylvain Pradalier's Ph. D. (École Polytechnique, September 2009).
  Current position: R&D Bioinformatics engineer at Dassault Systems, France.

Team and lab activities

- July 2020 - present: head of the studies in computer sciences at École normale supérieure.

- July 2017 - June 2020: deputy head of the studies in computer sciences at École normale supérieure.

- Jan 2016 - present: member of the INRIA Paris PhD Committee.

- Jan 2013 - present: member of the council of Laboratoire d'Informatique de l'École normale supérieure.

- Dec 2009 - June 2012: coorganizer (with Jean Krivine) of the working group of computational biology at École normale supérieure.

Research supervision

INTERNSHIPS

- November 2020 - August 2021: Noémie Fong (M2 student un the MPRI). Event structures compression.

- March - August 2020: Octave Hazard (student at X). Model of activation of a population of hepatic stellate cells by TGF-beta.

- March - August 2020: Alain Delaët Tixeult (M2 student in the MPRI). Incremental reachability analysis for Kappa.

- February - July 2019: Ivan Sraka (M2 student in Sciences, Technologies, and Health Master (Paris VI)). Design and implementation of a library to solve algebraic equations over set of rooted site graphs.

- September - December 2018: Albin Salazar (M2 student in the Interdisciplinary Approaches in Life Sciences (AIV) Master). Formalisation of time- and concentration-scales separation hypothese for reaction networks.

- January - June 2018: Aurélie Faure de Pebeyre (M1 student in the Interdisciplinary Approaches in Life Sciences (AIV) Master). Static analysis of polymers formation.

- July - August 2016: Anton Kulaga (M1 student in the Interdisciplinary Approaches in Life Sciences (AIV) Master). Design and development of a GUI to build, annotate, organize, and experiment models in Kappa.

- April - May 2016: Noémie Fong (L3 student in the department of Computer Sciences of École normale supérieure). Bibliographic works on static analysis of security properties.

- November 2015 - August 2016: Ken Chanseau Saint-Germain (M2 student in the Parisian Research Master in Computer Science (MPRI)). Numerically approximated model reduction.

- January 2016 (one week): Nina Varchavsky (L1 student in the Frontier of Life Science bachlor program). Introduction to static analysis.

- April - June 2013: Delphin Senizergues (L3 student in the mathematic department of École normale supérieure). Bibliographic works on model reduction.

- December 2013 (one week): Benjamin Audry (13 year student at College du Parc, Sucy en Brie). Randomized generation and exploration of mazes.

- January 2014 (one week): Emile Ferreux and Nessim Morsli (L1 students in the Frontier of Life Science bachelor program). Self-assembly of landscapes and dynamics of populations in Kappa.

- April - June 2014: Mendes Oulamara (L3 student in the computer science department of École normale supérieure). Bibliographic works on the verification of digital filters.

- May - July 2014: Pretesh Agrawal (Master student, IIT Kanpur, India). Stochastic systems.

PH. D. STUDENTS

- 2022 - present. Jérôme Boillot. Static analysis of the setting and the use of expanded memory in dedicated operating systems. **Funding:** CDSN (ENS-Lyon). 1 publication in international conferences during the Ph. D.

- 2021 - present. Aurélie Kong Win Cheng. Synthesis of explanations and causal compression for error scenarii in ERLANG systems. **Funding**: ANR DCore. Supervision 50% of the Ph. D. work. 1 publication in international workshops during the Ph. D. (cosupervision with Gregor Goessler, Inria Grenoble).

- 2019 - 2023. Albin Salazar. Faithfull reduction of Discrete Biological Models. **Funding:** Cordi-S (INRIA). 1 publication in international conferences during the Ph. D.

- 2017 - 2020. Marc Chevalier. Static analysis of security properties in software-intensive embedded systems. **Funding:** CDSN (ENS-Lyon).

- 2011 - 2017. Ferdinanda Camporesi. Model reduction for model of signaling pathways. Supervision of 80% of the Ph. D. work. 6 publications in international conferences during the Ph. D. **Funding:** Bologna grant and AbstractCell ANR-project.

POST-DOCTORAL STUDENTS

- March 2020 - August 2021: Sébastien Légaré. Compact representation of sets of event structures. **Funding:** DCore ANR-project.

- September 2017 - March 2020: Yves Stan Le Cornec. Static analysis of security properties in software-intensive embedded systems. **Funding:** AnaStaSec ANR-project.

- May 2016 - April 2018: Ferdinanda Camporesi. Modeling the extra-cellular matrix of the transforming growth factor. Supervision of 100 % of the post doctoral work. **Funding:** ITMO Plan Cancer.

- Jan 2015 - Dec 2017: Lý Kim Quyên. Implementation of KaSa, static analyzer for rule-based models. Supervision of 100% of the post doctoral work. **Funding:** Big Mechanism DARPA project.

- Jan - Oct 2011: Alessandro Romanel. Formal foundation for infinite differential semantics. Supervision of 100% of the post doctoral work. **Funding:** AbstractCell ANR-project. **Current position:** Post-doctoral fellow in the university of Trento, Italy.

- Nov 2011 - Oct 2012: Jonathan Hayman. Foundation of causality for model of signaling pathways. Supervision of 100% of the post doctoral work. 3 publications in international conferences on this topic during his Post-Doc. **Funding:** AbstractCell ANR-project. **Current position:** Research associate in Computer Laboratory in the University of Cambridge, UK.

- Oct 2012-Dec 2012: Luca Grieco. Translation from CellDesigner to Kappa. Supervision of 100% of the post doctoral work. A prototype has been released. **Funding:** AbstractCell ANR-project. **Current position:** Post-doctoral fellow in Pierre and Marie-Curie University, France.

- Feb 2012 - present: Norman Ferns. Approximate bisimulation frameworks for continuous stochastic models. Supervision of 100% of the post doctoral work. **Funding:** AbstractCell ANR-project.

- Dec 2013 - Nov 2014: Wassim Abou-Jaoudé. Automatic Synthesis of Qualitative models for signaling pathways. Supervision of 50% of the post doctoral work. **Funding:** Action Incitative (ÉNS).

Teaching

FIRST CYCLE (1030 HOURS)

- 2016 - 2018: Lectures (15 hours/year) in the bachelor program of the department of computer sciences of the École normale supérieure, semantics and applications to verification (L3);

- 2011 - 2017: Lectures (between 13 and 40 hours/year) in the "Frontiers in Life Sciences FDV Bachelor" program, about logic and linear algebra (L1);

- 2005 - 2007: Problem sets and sections (120 hours/year) in computer science for the students of the 'lycée Louis Le Grand' (Paris) applying to École Normale Supérieure;

- 2001 - 2004: Problem sets and sections (64 hours/year) in computer science for the students in the second year of the 'université Paris-Dauphine';

- 1998 - 2001: Problem sets and sections (80 hours/year) in computer science for the students of the 'lycée Marcelin BERTHELOT' (Saint-Maur, France) applying to École Normale Supérieure.

SECOND CYCLE (247 HOURS)

- 2021 - present: Lectures and practical sections (16 hours/year) for the program 'Parisian Master of Research in Computer Science" (MPRI) in the course on Biochemical Programming;

- 2009 - present: Lectures and practical sections (between 4 and 18 hours/year) for the program "Master to life sciences" (AIV) in the course on Computational Biology II;

- 2000 - present: Lectures (between 3 and 15 hours/year) for the program "Parisian Master of Research in Computer Science" (MPRI) in the course on Abstract Interpretation;

- 2017 - 2018 : Intervention (3 heures) for the program "Master AIRE EdTech" (CRI), impact of the numerical revolutoin in scientific activity;

- 2015 - 2016: Lecture (2 hours) for the program M2IF (ÉNS Lyon) in the context of Russ Harmer's course on Rule-based modelling;

- 2006 - 2009: Lectures (2 hours/year) for the program "Parisian Master of Research in Computer Science" in the context of Vincent DANOS, François FAGES, and Vincent SCHÄCHTER's course on Formal Bioinformatics;

INTERVENTION IN UNIVERSITIES ABROAD OR IN THEMATIC SCHOOLS (60 HOURS)

- 2018 - 2019: Lectures (3 hours) in the summer school "Modélisation Formelle de Réseaux de Régulation Biologique", Porquerolles, France;

- 2017 - 2018: Lectures (1.5 hours) in the aDVANCES IN SYSTEMS AND SYNTHETIC BIOLOGY Modelling Complex Biological Systems in the Context of Genomics Thematic Research School, Évry, France;

- 2015 - 2016: Lectures (3 hours) in the summer school "Modélisation Formelle de Réseaux de Régulation Biologique", Porquerolles, France;

- 2013 - 2014: Lectures (8 hours) for graduate students in East China Normal University (ECNU) "Abstract Interpretation Course", Shanghai, China;

- 2012 - 2013: Lectures (3 hours) in the summer school "Modélisation Formelle de Réseaux de Régulation Biologique", Porquerolles, France;

- 2011 - 2012: Lectures (2 hours) in the "Chair of Programming Methodology" at ETH Zürich, course on Static Program Analysis;

- 2010 - 2011: Lectures (20 hours) for graduate students in the University of Bologna about abstract interpretation and its applications;

- 2010 - 2011: Lectures (8 hours) for master students at the École normale supérieure of Lyon on rule base modeling and application to biomolecular networks;

- 2008 - 2009: Lectures (15 hours) for graduate students in Seoul National University invited by Kwangkeun YI, on abstract interpretation and its applications;

- 2005 - 2006: Lectures (4 hours) for the program "Master of Computer Science" at the University of Verona in the context of Roberto Giacobazzi's course on Automatic System Analysis and Verification;

The second cycles lectures and the intervention in universities abroad have been delivered in English.

Interests

- music: drums (13 years in the Music School, Jazz and Rock bands);
- sport: swimming (10 years in club), tennis (5 years in club).

LIST OF PUBLICATIONS

International journals with review committees

[1] Pierre Boutillier, Mutaamba Maasha, Xing Li, Héctor F. Medina-Abarca, Jean Krivine, Jérôme Feret, Ioana Cristescu, Angus G. Forbes, and Walter Fontana. The Kappa platform for rule-based modeling. *In Bioinformatics*, Vol. 34: No. 13, pp 1583–1592. – Oxford Academic.

[2] Jérôme Feret, and Kim Lý Quyên. Local traces: an over-approximation of the behaviour of the proteins in rule-based models. *In: IEEE/ACM Transactions on Computational Biology and Bioinformatics*. – ACM 2018.

[3] Wassim Abou-Jaoudé, Denis Thieffry, and Jérôme Feret. Formal Derivation of Qualitative Dynamical Models from Biochemical Networks. *In: BioSystems*. – Elsevier, 2016.

[4] Julien Bertrane, Patrick Cousot, Radhia Cousot, Jérôme Feret, Laurent Mauborgne, Antoine Miné, and Xavier Rival. Static Analysis and Verification of Aerospace Software by Abstract Interpretation. *Foundations and Trends in Programming Languages*, Vol. 2: No. 2-3, pp 71-190 – now publishers inc, 2015.

[5] Jérôme Feret, Heinz Koeppl, and Tatjana Petrov. – Stochastic fragments: A framework for the exact reduction of the stochastic semantics of rule-based models. *International Journal of Software and Informatics*, vol. 7(4), 78 pages – ISCAS, 2013.

[6] Jérôme Feret, Thomas Henzinger, Heinz Koeppl, and Tatjana Petrov. – Lumpability abstractions of rule-based systems. *In: Theoretical Computer Science, special issue MeCBIC 2009-2010*, vol. 431, 28 pages – Elsevier Inc, 2012.

[7] Eric J. Deeds, Jean Krivine, Jérôme Feret, Vincent Danos, and Walter Fontana. – Combinatorial complexity and compositional drift in protein interaction networks. *PLoS ONE*, vol. 7.(3). 22 pages – Public Library of Science, 2012.

[8] Russ Harmer, Vincent Danos, Jérôme Feret, Jean Krivine, and Walter Fontana. – Intrinsic information carriers in combinatorial dynamical systems. *Chaos*, vol. 20.(3), 16 pages – American Institute of Physics, 2010.

[9] Jérôme Feret, Vincent Danos, Jean Krivine, Russ Harmer, and Walter Fontana. – Internal coarse-graining of molecular systems. *Proceedings of National Academy of Sciences of the United States of America(PNAS)*, vol. 106.(16), 6 pages, 2009.

[10] Vincent Danos, Jérôme Feret, Walter Fontana, Russ Harmer and Jean Krivine. – Rule-based modelling and model perturbation. *Transactions on Computational Systems Biology (2009), LNCS*, n°5750, pp. 116–137. – Springer, 2009.

[11] Patrick Cousot, Radhia Cousot, Jérôme Feret, Laurent Mauborgne, Antoine Miné, and Xavier Rival. – Why does ASTRÉE scale up ? *Formal Methods in System Design.* – Springer, 2009.

[12] Jérôme Feret. – Abstract interpretation of mobile systems. *Journal of Logic and Algebraic Programming, Special issue on The pi-calculus*, vol. 63, pp. 59–130. – Elsevier Inc, 2005.

Book chapter

[13] Jérôme Feret. – Analyse statique et réduction de modèles de voies de signalisation intracellulaire . *In: Informatique Mathématique. Une photographie en 2023*, éd. by Laurent Fuchs. – CNRS 2023.

[14] Matthieu Bouguéon, Pierre Boutillier, Jérôme Feret, Octave Hazard, and Nathalie Theret. – A Kappa model for hepatic stellate cells activation by TGFB1. *In : Systems Biology Modelling and Analysis: Formal Bioinformatics Methods and Tools*, éd. by Elisabetta De Maria. – Wiley 2022.

[15] Jérôme Feret. – Analyses des motifs accessibles dans les modèles Kappa. *In : Approches symboliques de la modélisation et de l'analyse des systèmes biologiques*, éd. by Cédric Lhoussaine and Élisabeth Remy. – ISTE 2022.

[16] Nathalie Théret, Jérôme Feret, Arran Hodgkinson, Pierre Boutillier, Pierre Vignet, and Ovidiu Radulescu. Integrative models for TGF-β signaling and extracellular matrix. *In : Extracellular Matrix Omics*, ed. by Sylvie Ricard-Blum. Biology of Extracellular Matrix, volume 7, Springer, 2020.

[17] Julien Bertrane, Patrick Cousot, Radhia Cousot, Jérôme Feret, Laurent Mauborgne, Antoine Miné, and Xavier Rival. – L'analyseur statique Astrée, invited chapter. *In : Utilisations industrielles des techniques formelles : interprétation abstraite*, éd. par J.-L. Boulanger. – Hermes Science - Lavoisier, 2010.

[18] Elaine Murphy, Vincent Danos, Jérôme Feret, Jean Krivine, and Russell Harmer. – Rule-based modelling and model refinement, invited chapter. *In : Elements of Computational Systems Biology*, éd. par H. Lodhi and S. Muggleton. – Wiley Book Series on Bioinformatics, 2009.

[19] Bruno Blanchet, Patrick Cousot, Radhia Cousot, Jérôme Feret, Laurent Mauborgne, Antoine Miné, David Monniaux, and Xavier Rival. – Design and implementation of a special-purpose static program analyzer for safety-critical real-time embedded software, invited chapter. *In : The Essence of Computation: Complexity, Analysis, Transformation. Essays Dedicated to Neil D. Jones*, éd. par T. Mogensen, D. Schmidt, and I. Sudborough, *LNCS*, n°2566, pp. 85–108. – Springer, 2002.

International symposia with review committees

[20] Jérôme Feret and Albin Salazar. A generic framework to coarse-grain stochastic reaction networks by Abstract Interpretation. *In : Proceedings of 24st Verification, Model Checking and Abstract Interpretation, VMCAI 2023, LNCS.* – Springer 2023.

[21] Aurélie Kong, Jérôme Feret and Gregor Gössler. A Semantics of Core Erlang with Handling of Signals. *In : **ERLANG - Erlang Workshop - 2023**, Seattle, USA, Septembre 2023, ACM Digital Library.* – ACM 2023.

[22] Jérôme Boillot and Jérôme Feret. Symbolic transformation of expressions in modular arithmetic. *In : Proceedings of 30th Static Analysis Symposium, SAS 2023, LNCS.* – Springer 2023.

[23] Marc Chevalier and Jérôme Feret. Sharing ghost variables in a collection of abstract domains. *In : Proceedings of 21st Verification, Model Checking and Abstract Interpretation, VMCAI 2020, LNCS.* – Springer 2020.

[24] Pierre Boutillier, Ioana Cristescu, and Jérôme Feret. Counters in Kappa: Semantics, Simulation, and Static Analysis. *In : Proceedings of 22th European Symposium on Programming, ESOP 2019, LNCS.* – Springer 2019.

[25] Pierre Boutillier, Ferdinanda Camporesi, Jean Coquet, Jérôme Feret, Kim Lý Quyên, and Nathalie Théret. KaSa: A Static Analyzer for Kappa. *In : Proceedings of the 15th Conference on Computational Methods in Systems Biology, tools paper track, CMSB 2018, LNCS/LNBI.* – Springer 2018.

[26] Andreea Beica, Jérôme Feret, and Tatjana Petrov. Tropical Abstraction of Biobhemical Reaction Networks with Guarantees. *In : PostProceedings of the 9th International Workshop on Static Analysis and Systems Biology, SASB 2018. To appear in ENTCS.* – Elsevier.

[27] Pierre Boutillier, Aurélie Faure de Pebeyre, and Jérôme Feret. Proving the absence of unbounded polymers in rule-based models. *In : PostProceedings of the 9th International Workshop on Static Analysis and Systems Biology, SASB 2018. To appear in ENTCS.* – Elsevier.

[28] Ferdinanda Camporesi, Jérôme Feret, and Kim Lý Quyên. KaDE: a Tool to Compile Kappa Rules into (Reduced) ODE Models. *In : Proceedings of the 14th Conference on Computational Methods in Systems Biology, tools paper track, CMSB 2017, LNCS/LNBI.* – Springer 2017.

[29] Ferdinanda Camporesi, andJérôme Feret. Using alternated sums to express the occurrence number of extended patterns in site-graphs. *In : PostProceedings of the 8th International Workshop on Static Analysis and Systems Biology, SASB 2017. in ENTCS.* – Elsevier.

[30] Daniel Kästner, Antoine Miné, André Schmidt, Heinz Hille, Laurent Mauborgne, Stephan Wilhelm, Xavier Rival, Jérôme Feret, Patrick Cousot, with Christian Ferdinand. Finding All Potential Run-Time Errors and Data Races in Automotive Software. *In : Proceedings of the SAE wold Congress 2017, SAE 2017.*

[31] Jérôme Feret, and Kim Lý Quyên. Reachability analysis via orthogonal sets of patterns. *In : PostProceedings of the 7th Conference on Static Analysis and Systems Biology, SASB 2016. ENTCS.* – Elvevier Science Publishers, 2016.

[32] Jérôme Feret, and Kim Lý Quyên. Local traces: an over-approximation of the behaviour of the proteins in rule-based models. *In : Proceedings of the 14th Conference on Computational Methods in Systems Biology, CMSB 2016. LNCS/LNBI.* – Springer, 2016.

[33] Antoine Miné, Laurent Mauborgne, Xavier Rival, Jérôme Feret, Patrick Cousot, Daniel Kästner, Stephan Wilhelm, andChristian Ferdinand. Taking Static Analysis to the Next Level: Proving the Absence of Run-Time Errors and Data Races with Astrée. *In Proceedings of the Embedded Real Time Software and Systems (ERTS 2016).*

[34] Wassim Abou-Jaoudé, Jérôme Feret, and Denis Thieffry. Derivation of Qualitative Dynamical Models from Biochemical Networks. *In : Proceedings of the 13th Conference on Computational Methods in Systems Biology, CMSB 2015. LNCS/LNBI.* – Springer, 2015.

[35] Jérôme Feret. – An algebraic approach for inferring and using symmetries in rule-based models. *In : PostProceedings of the 5th Conference on Static Analysis and Systems Biology, SASB 2014. ENTCS.* – Elvevier Science Publishers, 2015.

[36] Ferdinanda Camporesi, Jérôme Feret, and Jonathan Hayman. – Context-sensitive flow analyses: a hierarchy of model reductions. *In : Proceedings of the 11th Conference on Computational Methods in Systems Biology, CMSB 2013. LNCS/LNBI.* – Springer, 2013.

[37] Tatjana Petrov, Jérôme Feret, and Heinz Koeppl. – Reconstructing species-based dynamics from reduced stochastic rule-based models. *In : Proceedings of the Winter Simulation Conference, WSC 2012.* – IEEE, 2012.

[38] Vincent Danos, Jérôme Feret, Walter Fontana, Russell Harmer, Jonathan Hayman, Jean Krivine, Chris Thompson-Walsh, and Glynn Winskel. – Rewriting and Pathway Reconstruction for Rule-Based Models. *In : Proceedings of the 32nd IARCS Annual Conference on Foundations of Software Technology and Theoretical Computer Science, FSTTCS 2012.* LIPIcs, vol 18. – Dagstuhl Publishing 2012.

[39] Ferdinanda Camporesi and Jérôme Feret. – Formal reduction for rule-based models. *In : Post-proceedings of the Twenty-seventh Conference on the Mathematical Foundations of Programming Semantics, MFPS XXVII. ENTCS*, vol. 276, pp. 31–61. – Elsevier Science Publishers, 2011.

[40] Jérôme Feret. – Formal model reduction. *In : Proceedings of the Eighteenth International Static Analysis Symposium (SAS 2011). LNCS*, n°6887, p. 6. – Springer, 2011.

[41] Daniel Kästner, Stephan Wilhelm, Stefana Nenova, Patrick Cousot, Radhia Cousot, Jérôme Feret, Laurent Mauborgne, Antoine Miné, and Xavier Rival. – Astrée: Proving the absence of runtime errors. *In : Proceedings of the Embedded Real Time Software and Systems (ERTS 2010).*

[42] Julien Bertrane, Patrick Cousot, Radhia Cousot, Jérôme Feret, Laurent Mauborgne, Antoine Miné, and Xavier Rival. Static Analysis and Verification of Aerospace Software by Abstract Interpretation. In *AIAA Infotech@Aerospace 2010*, Atlanta, Georgia, American Institute of Aeronautics and Astronautics, 20–22 April 2010. Prix du meilleur article.

[43] Ferdinanda Camporesi, Jérôme Feret, Heinz Koeppl, and Tatjana Petrov. – Combining model reductions. *In : Post-Proceedings of the Twenty-sixth Conference on the Mathematical Foundations of Programming Semantics, MFPS XXVI. ENTCS*, vol. 265, pp. 73–96. – Elsevier Science Publishers, 2010.

[44] Jérôme Feret. – Fragments-based model reduction: some case studies. *In : Post-Proceedings of the First International Workshop on Interactions between Computer Science and Biology, CS2Bio 2010. ENTCS.* – Elsevier Science Publishers 2010.

[45] Vincent Danos, Jérôme Feret, Walter Fontana, Russel Harmer, and Jean Krivine. – Abstracting the differential semantics of rule-based models: exact and automated model reduction. *In : Proceedings of the Twenty-Fifth Annual IEEE Symposium on Logic in Computer Science, LICS '2010. IEEE*, pp. 362–381. – IEEE Computer Society Press 2010.

[46] Jérôme Feret, Thomas Henzinger, Heinz Koeppl, and Tatjana Petrov. – Lumpability abstractions of rule-based systems. *In : Proceedings of the 4th Workshop on Membrane Computing and Biologically Inspired Process Calculi (MeCBIC 2010). EPTCS* – Electronic Proceedings in Theoretical Computer Science.

[47] Ferdinanda Camporesi, Jérôme Feret, Heinz Koeppl, and Tatjana Petrov. – Automatic reduction of stochastic rules-based models in a nutshell. *In : Proceedings of the 8th International Conference of Numerical Analysis and Applied Mathematics (ICNAAM 2010). American Institute of Physics Conference Proceedings*, n°1281, pp. 1330–1334. – American Institute of Physics 2010.

[48] Julien Bertrane, Patrick Cousot, Rhadia Cousot, Jérôme Feret, Laurent Mauborgne, Antoine Miné, David Monniaux, and Xavier Rival. – Static analysis by abstract interpretation of embedded critical software. *In : Proceedings of the Third IEEE International Workshop UML and Formal Methods (UML&FM 2010). ACM SIGSOFT Software Engineering Notes (SEN) vol.36(1).* – ACM 2011.

[49] Vincent Danos, Jérôme Feret, Walter Fontana, Russel Harmer, and Jean Krivine. – Investigation of a biological repair scheme. *In : Proceedings of the 9th Workshop on Membrane Computing WMC9. LNCS*, n°5391, pp. 1–12. – Springer 2009.

[50] Olivier Bouissou, Eric Conquet, Patrick Cousot, Radhia Cousot, Jérôme Feret, Khalil Ghorbal, Eric Goubault, David Lesens, Laurent Mauborgne, Antoine Miné, Sylvie Putot, Xavier Rival, and Michel Turin. – Space Software validation using abstract interpretation. *In : Proceedings of the conference of DAta System In Aerospace (DASIA 2009)*, vol. SP-669, pp. 1–7. *ESA.* 2009.

[51] Daniel Kästner, Christian Ferdinand, Stephan Wilhelm, Stefana Nenova, Olha Honcharova, Patrick Cousot, Radhia Cousot, Jérôme Feret, Laurent Mauborgne, Antoine Miné, Xavier Rival, and Élodie-Jane Sims. – Astree: Nachweis der Abwesenheit von Laufzeitfehlern. *In : Workshop "Entwicklung zuverlässiger Software-Systeme"*, Regensburg, German, 18 June 2009.

[52] Vincent Danos, Jérôme Feret, Walter Fontana, and Jean Krivine. – Abstract interpretation of reachable complexes in biological signalling networks. *In : Proceedings of the 9th International Conference on Verification, Model Checking and Abstract Interpretation (VMCAI 2008). LNCS*, n°4905, pp. 83–97. – Springer 2008.

[53] Vincent Danos, Jérôme Feret, Walter Fontana, Russel Harmer, and Jean Krivine. – Rule-based modelling, symmetries, refinements. *In : Proceedings of Formal Modelling Systems Biology (FMSB 2008). LNBI*, n°5054, pp. 103–122. – Springer 2008.

[54] Vincent Danos, Jérôme Feret, Walter Fontana, and Jean Krivine. – Scalable simulation of cellular signaling networks. *In : Proccedings of the 5th Asian Symposium on Programming Languages and Systems (APLAS 2007). LNCS*, n°4703, pp. 139–157. – Springer 2007.

[55] Jérôme Feret. – Reachability analysis of biological signalling pathways by abstract interpretation. *In : Proccedings of the International Conference of Computational Methods in Sciences and Engineering (IC-CMSE 2007). American Institute of Physics Conference Proceedings*, n°963.(2), pp. 619–622. – American Institute of Physics 2007.

[56] Vincent Danos, Jérôme Feret, Walter Fontana, Russell Harmer, and Jean Krivine. – Rule-based modelling of cellular signalling. *In : Proceedings of the 18th International Conference on Concurrency Theory (CONCUR 2007). LNCS*, n°4703, pp. 17–41. – Springer 2007.

[57] Patrick Cousot, Radhia Cousot, Jérôme Feret, Laurent Mauborgne, Antoine Miné, David Monniaux, and Xavier Rival. – Varieties of static analyzers: a comparison with ASTRÉE. *In : Proccedings of the 1st International Symposium on Theoretical Aspects of Software Engineering (TASE 2007)*. pp. 3–20. – IEEE Computer Society Press 2007.

[58] Patrick Cousot, Radhia Cousot, Jérôme Feret, Laurent Mauborgne, Antoine Miné, David Monniaux, and Xavier Rival. – Combination of Abstractions in the ASTRÉE Static Analyzer. *In : Post-proceeding of the 11th Annual Asian Computing Science Conference (ASIAN 2006). LNCS*, n°4435, pp. 1–24. – Springer 2007.

[59] Jérôme Feret. – The arithmetic-geometric progression abstract domain. *In : Proceedings of the Sixth International Conference on Verification, Model Checking and Abstract Interpretation (VMCAI 2005). LNCS*, n°3385, pp. 42–58. – Springer, 2005. Prix du meilleur article.

[60] Patrick Cousot, Radhia Cousot, Jérôme Feret, Laurent Mauborgne, Antoine Miné, David Monniaux, and Xavier Rival. – The ASTRÉE analyzer. *In : Proceedings of the Eight European Symposium on Programming (ESOP 2005). LNCS*, n°3444, pp. 21–30. – Springer, 2005.

[61] Jérôme Feret. – Static analysis of digital filters. *In : Proceedings of the Seventh European Symposium on Programming (ESOP 2004). LNCS*, n°2986, pp. 33–48. – Springer, 2004.

[62] Bruno Blanchet, Patrick Cousot, Radhia Cousot, Jérôme Feret, Laurent Mauborgne, Antoine Miné, David Monniaux, and Xavier Rival. – A static analyzer for large safety-critical software. *In : Proceedings of the ACM SIGPLAN '2003 Conference on Programming Language Design and Implementation (PLDI 2003)*, pp. 196–207. – ACM Press.

[63] Jérôme Feret. – Dependency analysis of mobile systems. *In : Proceedings of the Fifth European Symposium on Programming (ESOP 2002). LNCS*, n°2305, pp. 314–330. – Springer, 2002.

[64] Jérôme Feret. – Abstract interpretation-based static analysis of mobile ambients. *In : Proceedings of the Eighth International Static Analysis Symposium (SAS 2001). LNCS*, n°2126, pp. 413–431. – Springer, 2001.

[65] Jérôme Feret. – Confidentiality analysis of mobile systems. *In : Proceedings of the Seventh International Static Analysis Symposium (SAS 2000). LNCS*, n°1824, pp. 135–154. – Springer, 2000.

[66] Jérôme Feret. – Occurrence counting analysis for the π-calculus. *In : Second workshop on GEometric and Topological methods in COncurrency theory (GETCO 2000). ENTCS*, vol. 39.2. – Elsevier Science Publishers, 2001.

National symposia with review committees

[67] Sébastien Légaré, Jean Krivine, and Jérôme Feret. – Distinguishing Context Dependent Events in Quotients of Causal Stories. *In : JOBIM 2021 - Journées Ouvertes en Biologie, Informatique et Mathématiques.* – Institut Pasteur 2021.

Proceedings Editing

[68] Jérôme Feret, Loïc Paulevé, and David Safranek (Eds). Special issue on SASB 2016 and VEMDP 2015. Theoretical Computer Sciences. to appear.

[69] Jérôme Feret and Heinz Koeppl (Eds.). – Proceedings of the 15th International Conference, CMSB 2017. *Lecture notes in Computer Science* LNCS/LNBI vol. 10545, – Springer.

[70] Jérôme Feret and Andre Levchenko (Eds.). – Proceedings of the 3rd International Workshop on Static Analysis and Systems Biology, SASB 2012. *Electonic Notes in Theoretical Computer Science*, vol. 313, – Elsevier Science.

[71] Jérôme Feret and Andre Levchenko (Eds.). – Proceedings of the 2nd International Workshop on Static Analysis and Systems Biology, SASB 2011. *Electonic Notes in Theoretical Computer Science*, vol. 284, – Elsevier Science.

[72] Jérôme Feret and Andre Levchenko (Eds.). – Proceedings of the 1st International Workshop on Static Analysis and Systems Biology, SASB 2010. *Electonic Notes in Theoretical Computer Science*, vol. 272, – Elsevier Science.

Miscellaneous

[73] Jérôme Feret. – The arithmetic-geometric progression abstract domain. *Selectionné pour le numéro spécial de : the Sixth International Conference on Verification, Model Checking and Abstract Interpretation (VMCAI 2005)*, 18 pages – to appear.

[74] Jérôme Feret. – Static analysis of digital filters. *Sélectionné pour le numéro spécial de : the First International workshop on Numerical and Symbolic Abstract Domains (NSAD 2005)*, 52 pages – to appear.

Ph. D. report

[75] Jérôme Feret. – *Analysis of Mobile Systems by Abstract Interpretation.* – Ph. D. Thesis in Computer Science, École polytechnique, February 25th 2005.

These publications are available online at the following address:

http://www.di.ens.fr/~feret/publications/