ALLEGATO B

UNIVERSITÀ DEGLI STUDI DI MILANO
selezione pubblica per n.1 posto/i di Ricercatore a tempo determinato ai sensi dell'art.24, comma 3, lettera b) della Legge 240/2010 per il settore concorsuale 01/B1 - Informatica, settore scientifico-disciplinare INF/01 – Informatica presso il Dipartimento di INFORMATICA "GIOVANNI DEGLI ANTONI", (avviso bando pubblicato sulla G.U. n. IV (23) del 20.3.2020) Codice concorso 4285

OZAN KAHRAMANOGULLARI
CURRICULUM VITAE

INFORMAZIONI PERSONALI (NON INSERIRE INDIRIZZO PRIVATO E TELEFONO FISSO O CELLULARE)

COGNOME	**KAHRAMANOGULLARI**
NOME	**OZAN**
DATA DI NASCITA	**18/10/1977**

Data 19/4/2020 Luogo Trento

Ozan Kahramanoğulları, PhD

ORCID: 0000-0001-5178-7470

ozan-k.com

April 19th, 2020

Current Positions

2019 – **Researcher**
Department of Cellular, Computational and Integrative Biology (CIBIO)
& Department of Mathematics, **University of Trento**, Italy

Consultant
ThinkNode Life Science Inc., San Diego, California, USA

Previous Positions

2014 – 2019 **Assistant Professor**
Department of Mathematics, **University of Trento**, Italy

2009 – 2017 **Researcher**
The Microsoft Research - University of Trento
Centre for Computational and Systems Biology, Italy

2006 - 2009 **Research Associate**
Department of Computing, **Imperial College** &
Centre for Integrative Systems Biology at Imperial College

2005 – 2006 **Teaching Assistant**, **Dresden University of Technology**

2001 – 2002 *Institute for Artificial Intelligence*
Teaching: "Logik" course, taught in German language

2000 **Software Developer,** Hybris GmbH, Dresden, Germany

Qualifications

2002 – 2006 **PhD** *Computer Science*, **Dresden University of Technology**, Germany
Grant: "DFG Graduiertenkolleg 446" at the **University of Leipzig**
Supervised by Dr. A. Guglielmi, Prof. S. Hölldobler and Prof. G. Brewka

1999 – 2002 **MSc** Computer Science, **Dresden University of Technology**, Germany
Supervised by Prof. M. Thielscher, *Grade:* 1.5 (*excellent*)
MSc thesis published at the KI'03 Conference, LNCS 2821, Springer

1994 – 1999 **BSc** Mathematics, **Hacettepe University**, Ankara, Turkey

Grants

2017 – 2019 *European Union Horizon 2020 - Living Architecture*, **University of Trento**
Project leader: modelling of phosphate economy in *E. coli*
PI: Prof. Martin Hanczyc. 217.218,75 € (3.216.555 € to 6 institutions).

2006 – 2009 *Biotechnology and Biological Sciences Research Council*
Post-doctoral research, CISBIC, **Imperial College**, UK
PI: Prof. L. Cardelli & Prof. P. Gardner, ca. 150.000 £

2002 – 2005 *German Research Foundation* PhD Studentship, "DFG Graduiertenkolleg 446"
University of Leipzig & **Dresden University of Technology**, Germany
PI: Prof. G. Brewka, ca. 60.000 €

2004 **Protheo Group, LORIA**, Nancy, France, November- December, 2004
German Academic Exchange Service, *Visiting researcher grant*
PI: Prof. S. Hölldobler

2001 **University of Amsterdam**
Institute for Logic, Language and Computation, January - July, 2001
German Academic Exchange Service, *Exchange student grant*
PI: Prof. S. Hölldobler

Supervision of Research Students

2019 –	Elena Righetti - MSc Thesis, **University of Trento**, Dep. of Mathematics Bacterial response mechanisms to changes in external phosphate levels.
2015 – 2018	Cansu Uluseker - PhD Thesis, grade: *cum laude* (with honors), 15.10.2018. **University of Trento**, Dep. of Cellular, Comp. and Integrative Biology. *Thesis:* A systems and synthetic biology framework for regulatory systems. Researcher at the *University of Stavanger.*
2014 – 2017	Federico Reali - PhD Thesis, grade: *cum laude* (with honors), 24.3.2017. **University of Trento**, Department of Mathematics. *Thesis:* Dynamical models for diabetes: insights into insulin resistance and type 1 diabetes. Researcher at *The Microsoft Research - University of Trento COSBI*
2016	Andrea Giachino - BSc Thesis, grade: *cum laude* (with honors), 26.9.2016. Centre for Integrative Biology, **University of Trento**. *Thesis:* Intrinsic Regulation of Actin Steady-State. PhD student at the Newcastle University.

Teaching Activities

2014 –	*Assistant Professor.* Preparation and teaching of a course each semester. Systems Biology (Italian), Modelling and Simulation of Biological Systems, Biological Networks, Biostatistics, Advanced Topics in Biomathematics **University of Trento**, Italy
2006 – 2009	*Teaching Assistant.* Assisting tutorials for two hours per week per semester. Formal Software Verification, Robotics, Programming, Bioinformatics. **Imperial College**, UK
2005 – 2006	*Teaching Assistant.* Four hours per week held in German language.
2001 – 2002	Logic, **Dresden University of Technology**

Institutional Responsibilities

2014 – 2019	Faculty member, Organiser of bi-weekly modelling seminars Department of Mathematics, University of Trento, Italy
2006 – 2009	Organiser of the Internal Seminar CISBIC, Imperial College, UK
2002 – 2005	Speaker of the Graduiertenkolleg 446 PhD Programme University of Leipzig, Germany
2000 – 2002	Student representative of the Examination Commission International Masters Programme in Computational Logic Dresden University of Technology, Germany.

Reviewer for Journals Logical Methods in Computer Science, Adaptive Behaviour, Bioinformatics, Nucleic Acid Therapeutics, Journal Of Computational Physics, BMC Bioinformatics, Artificial Life Journal, Natural Computing, Journal of Artificial Intelligence Research, BMC Systems Biology, Transactions on Computational Systems Biology, Science of Computer Programming, Formal Aspects of Computing, Theoretical Computer Science, Genetic Programming and Evolvable Machines, Molecular BioSystems, Adaptive Behavior.

Languages

English (*fluent*), German (*fluent*), Italian (*fluent*), Dutch (*beginner*), Turkish (*mother tongue*)

April 19th, 2020

Research and Teaching Statement

My research is interdisciplinary. I study questions related to natural and artificial systems consisting of interacting components. In particular, biological systems exhibit many properties that are commonly studied by computer scientists. By exploiting their similarities, I address biological problems by using computer science methods along with those from applied mathematics and statistics. The primary outcome of this research is in the form of answers to specific questions on the systems under study, and in certain cases, in new technologies for a broader audience.

My background in mathematics, artificial intelligence, and proof theory helps me to connect representational aspects of the practical problems with operational semantics. Because proof theory provides a foundation for computer languages, it serves as a theoretical tool for bridging seemingly unrelated notions. I use this set-up to develop domain-specific tools for providing insights into biological problems. I thus believe in the value of a research agenda that cleanly connects neighboring fields.

I use simulation models to provide answers to quantitative questions in biology with implications on society. Examples to the questions that I have addressed in my published research include: “what are the conditions that provide efficacy to a cancer drug?”, “what are the biochemical mechanisms that result in insulin resistance?”, and “what are the genetic interventions that increase the E. coli phosphate intake for recycling wastewater?”. In particular, this latter question has been addressed in my contribution to the EU Horizon 2020 project Living Architecture. My collaborators at the Spanish National Research Council in Madrid are using our results to develop a library of synthetic promoters for improving bacterial phosphate absorption capacity. In ongoing research, we are investigating related research questions to provide a systematic methodology for the computerized design of synthetic biology applications. I am also currently exploring the industrial spin-off potential of this research agenda within the Bootstrap programme of “Hub Innovazione Trentino”.

Like my research, my teaching activities are based on interdisciplinary considerations. In my teaching, more than delivering the facts and the rules to solve specific problems to the students, I try to provide guidance to help the students explore their potential for original thinking. I encourage the students to carry over notions across disciplines and proactively apply their ideas to address scientific problems. I aim at facilitating this at my courses so that they can consolidate their knowledge by practice. For example, in my systems biology courses, I give group assignments, whereby students with different backgrounds are required to work together and learn from each other. I apply the same principles in the supervision of PhD and Masters theses, which has worked well so far: all of my graduate students have obtained world class results and they have been successfully pursuing scientific careers at renowned institutions.

Over the next years, I plan to develop my research to establish a systematic methodology for quantitative analysis of biological systems. At one end of the spectrum, this line of research will target applications relevant to biotechnology and life sciences, in general, as in my past research. At the complementary end of the spectrum, I aim at developing a methodology and a suite of computational tools that are tailored to assist investigations on quantitative aspects of biological systems. Obtaining external funding by research grants is of paramount importance for this endeavor; I prioritize this highly for the near future.

My track record and curriculum demonstrate my scientific potential, through collaborations with the institutes in Italy as well as in the UK, Europe, and the USA. A researcher position at the Department of Computer Science at the University of Milan will provide me the invaluable opportunity to pursue and consolidate a line of research that connects computer science with practical problems in life sciences. I am thus looking forward to an opportunity that will allow me to expand my research by collaborations within this department as well as those for life sciences. By doing so, I believe that I can contribute to the scientific and financial growth of the department and its teaching activities, and further my knowledge and experience to advance in my career. I am thus looking forward to having an opportunity to introduce myself in person.

Journal Papers. *: corresponding author, †: alphabetical order

Cansu Uluşeker, Jesús Torres-Bacete, José L. García, Martin M. Hanczyc, Juan Nogales, Kahramanoğulları, O.*, 2018,
Quantifying dynamic mechanisms of auto-regulation in Escherichia coli with synthetic promoter in response to varying external phosphate levels,
Scientific Reports, 9 (2076).

Reali, F., M. Morine, M., Kahramanoğulları, O., Raichur, S. H. Schneider, D. Crowther, C. Priami, 2017,
Mechanistic interplay between ceramide and insulin resistance,
Scientific Reports, 7 (41231).

Kahramanoğulları, O.*, Cardelli L., 2015,
Gener: A minimal programming module for chemical controllers based on DNA strand displacement, Bioinformatics, 31(17).

Kahramanoğulları, O., 2014,
Interaction and Depth against Nondeterminism in Proof Search,
Logical Methods in Computer Science, 10 (2:5).

Kahramanoğulları, O.*, Lynch J., 2013,
Stochastic Flux Analysis of Chemical Reaction Networks,
BMC Systems Biology, 7:133.

Kahramanoğulları, O.*, Fantaccini G., Lecca P., Morpurgo D., Priami C., 2012,
Algorithmic modeling quantifies the complementary contribution of metabolic inhibitions to gemcitabine efficacy, PLoS ONE, 7(12).

Kahramanoğulları, O.*, Cardelli L., 2012,
An Intuitive Modelling Interface for Systems Biology,
International Journal of Software and Informatics. 7:4.

Kahramanoğulları, O., Lynch J., Jordan F., 2011,
CoSBiLab LIME: a language interface for stochastic dynamical modelling in ecology,
Environmental Modelling and Software, 26:685-687.

Cardelli, L., Caron, E., Gardner, P., Kahramanoğulları, O.*,†, Phillips A., 2009,
A Process Model of Rho GTP-binding Proteins,
Theoretical Computer Science, 410:3166-3185.

Gurry T. and Kahramanoğulları, O., Endres R., 2009,
Biophysical Mechanism for Ras-Nanocluster Formation and Signaling in Plasma Membrane,
PLoS ONE, 4.

Kahramanoğulları, O., 2009,
On Linear Logic Planning and Concurrency,
Information and Computation, 207(11):1229-1258.

Kahramanoğulları, O., 2008,
System BV is NP-complete,
Annals of Pure and Applied *Logic*, 152(1-3):107-121.

Books and Chapters

Kahramanoğulları, O., Vaggi F., Phillips A., 2012,
Process Modeling and Rendering of Biochemical Structures: Actin,
Biomechanics of cells and tissues: experiments, models and simulations,
Lecture Notes in Computational Vision and Biomechanics, Springer.

Kahramanoğulları, O., 2012,
Nondeterminism and Language Design in Deep Inference,
A Proof Theoretic Approach to Logic Programming,
Lambert Academic Publishing, ISBN 978-3-659-13475-3.

Kahramanoğulları, O., 2012,
Process algebra models in biology: the case of phagocytosis,
Bioinformatics & Computational Systems Biology:
Recent Advances and Applications, IGI Global.

Published Conference and Workshop Papers

Kahramanoğulları, O., Lorenzo Bramanti, Maria Carla Benedetti, 2019,
Stochastic Mechanisms of Growth and Branching in Mediterranean Coral Colonies.
Proc. of 8th International Conference on the Theory and Practice of Natural Computing,
TPNC 2019, Kingston, Canada, December 9-11, 2019, LNCS, Springer.

Kahramanoğulları, O., Cansu Uluşeker, Martin M. Hanczyc, 2019,
Stochastic Mechanisms of Information Flow in Phosphate Economy of Escherichia Coli.
Proc. of the 3rd International Conference on Numerical Computation: Theory and Applications,
NUMTA 2019, Le Castella, Italy, June 15-21, 2019, LNCS, Springer.

Kahramanoğulları, O., 2019,
On Quantitative Comparison of Chemical Reaction Network Models.
Proceedings of 3rd Workshop on Program Equivalence and Relational Reasoning.
PERR 2019, Prague, April 6, EPTCS.

Kahramanoğulları, O., 2019,
Enumerating Dominant Pathways in Biological Networks by Information Flow Analysis.
Proceedings of 4th International Conference on Algorithms for Computational Biology
AlCoB 2019, Berkley, USA, June 28-30, LNCS, Springer.

Cansu Uluşeker, Martin M. Hanczyc, Kahramanoğulları, O., 2018,
Mechanisms of Switching Response to External Phosphate Levels in Escherichia coli.
Artificial Life Conference Proceedings, 23-27 July, 2018, Tokyo.

Cansu Uluşeker, Jesús Torres-Bacete, José L. García, Martin M. Hanczyc,
Juan Nogales, Kahramanoğulları, O., 2017,
A Dynamic Model of the Phosphate Response System with Synthetic Promoters in E. coli.
Proc. of the International Conference on Artificial Life, 4-8 September, 2017, Lyon.

Kahramanoğulları, O., 2017,
Quantifying Information Flow in Chemical Reaction Networks.
Proceedings of 4th International Conference on Algorithms for Computational Biology
AlCoB 2017, Aveiro, Portugal, June 5-6, LNCS, Springer.

Kahramanoğulları, O., 2017,
Deep Proof Search in MELL.
Proceedings of Logic for Programming, Artificial Intelligence, and Reasoning,
21st International Conference, Proc. of LPAR'17, Maun Botswana, May 7-12.

Kahramanoğulları, O., 2016,
Simulating Stochastic Dynamic Interactions with Spatial Information and Flux.
Proc. of 5th International Conference on the Theory and Practice of Natural Computing, TPNC 2016, Sendai, Japan December 12-13, 2016, LNCS, Springer.

Kahramanoğulları, O., 2016,
True Concurrency of Deep Inference Proofs.
Proceedings of 23rd Workshop on Logic, Language, Information and Computation, WoLLIC 2016, August 16-19, 2016, Puebla, Mexico, LNCS 9803, Springer.

Zunino R., Nikolic D., Priami C., Kahramanoğulları, O., Priami C., Schiavinotto T., 2015,
ℓ: An Imperative DSL to Stochastically Simulate Biological Systems.
Proceedings of Programming Languages with Applications to Biology and Security 2015, LNCS 9465, Springer.

Kahramanoğulları, O., Lynch J., Priami C., 2014,
Algorithmic Systems Ecology: Experiments on Multiple Interaction Types and Patches.
Proceedings of InSuEdu 2012, LNCS 7991, Springer.

Kahramanoğulları, O., Jordan F., Priami C., 2011,
Composability: Perspectives in Ecological Modeling.
Proceedings of ANB 2011, LNCS 6479, Springer.

Lecca P. and Kahramanoğulları, O., Morpurgo D., Priami C., Soo R. A., 2011,
Modelling and estimating dynamics of tumor shrinkage with BlenX and KInfer.
13th International Conference on Modelling and Simulation,
March 30 - April 1, Cambridge, UKSim 2011, IEEE.

Kahramanoğulları, O., 2010,
Flux Analysis in Process Models via Causality.
3rd Workshop "From Biology To Concurrency and back".
Proceedings of FBTC'10, March 27, 2010, Paphos, Cyprus, EPTCS 19.

Kahramanoğulları, O., Cardelli L., Caron E., 2009,
An Intuitive Automated Modelling Interface for Systems Biology.
Fifth Workshop on Developments in Computational Models
Computational Models From Nature., Rhodes, Greece, Proceedings of DCM'09, EPTCS 9.

Cardelli, L., Caron, E., Gardner, P., Kahramanoğulları, O., Phillips A., 2009,
A Process Model of Actin Polymerisation,
Proceedings of the workshop From Biology To Concurrency and back, FBTC'08,
Reykjavik, Volume 229 of ENTCS, Elsevier.

Kahramanoğulları, O., 2008,
On Linear Logic Planning and Concurrency,
Proceedings of the 2nd International Conference on Language and Automata Theory and Applications, LATA'08, Tarragona, Spain, Volume 5196 of LNCS, Springer.

Kahramanoğulları, O., Cardelli, L., Gardner, P., 2008,
A Process Model of Rho GTP-binding Proteins in the Context of Phagocytosis,
Proceedings of the workshop From Biology To Concurrency and back, FBTC'07,
Lisbon, Portugal, Volume 194 of ENTCS, Elsevier.

Kahramanoğulları, O., 2008,
Maude as a Platform for Designing and Implementing Deep Inference Systems,
Proceedings of the Eighth International Workshop on Rule-Based Programming,
RULE'07, Paris, France, Volume 219 of ENTCS, Elsevier.

Kahramanoğulları, O., 2006,
Reducing Nondeterminism in the Calculus of Structures,
Proceedings of the 13th International Conference on Logic for
Programming Artificial Intelligence and Reasoning, LPAR'06,
Phnom Penh, Cambodia, Volume 4246 of LNCS, Springer.

Kahramanoğulları, O., 2006,
System BV is NP-complete,
Proceedings of the 12th Workshop on Logic, Language, Information and Computation,
WoLLIC'05, Florianapolis, Brazil, Volume 143 of ENTCS, Elsevier.

Kahramanoğulları, O., Moreau P-E., Reilles A., 2005,
Implementing Deep Inference in TOM,
Proceedings of the Workshop on Structures and Deduction 2005, SD'05,
satellite workshop of ICALP 2005, July 11 - 15, Lisbon, Portugal.

Kahramanoğulları, O., 2005,
Towards Planning as Concurrency,
Proceedings of the IASTED International Conference on
Artificial Intelligence and Applications, AIA'05, Innsbruck, Austria, Acta Press.

Kahramanoğulları, O., 2004,
System BV without the Equalities for Unit,
Proceedings of the 19th Int. Symposium on Computer and Information Sciences,
Kemer, Turkey, Volume 3280 of LNCS, Springer.

Kahramanoğulları, O., 2004,
Implementing system BV of the calculus of structures in Maude,
Proceedings of the ESSLLI-2004 Student Session, 117-127, Nancy, France.
Short-listed for best paper.

Kahramanoğulları, O., Thielscher, M., 2003,
A Formal Assessment Result for Fluent Calculus Using the Action Description Language $\mathcal{A}_k$,
Proceedings of the 26th Annual German Conference on Artificial Intelligence,
KI'03, Hamburg, Volume 2821 of LNAI, Springer.

Invited Talks

June 2019 — *Stochastic Mechanisms of Information Flow in Phosphate Economy of E. Coli*
Numerical Computations: Theory and Algorithms. The 3rd International Conference and Summer School, Crotone, Italy, June 15 – 21, 2014.
Special Session on Computational Methods for data analysis

June 2014 — *A theory of model equivalence based on stochastic simulation fluxes*
5th Workshop on Logic and Systems Biology, associated with CSL/LICS 2014, Vienna, Austria, July 13, 2014,

June 2011 — *An algorithmic model of gemcitabine mechanisms of action*
PharmSciFair, Pharmaceutical Sciences for the Future of Medicines, Prague, Czech Republic, June 13-17, 2011.

Dec. 2009 — *Processes of Biology*
University of Turin, Department of Computer Science, Turin, Italy.

Nov. 2007 — *A Deductive Language for Everything*
University of Bath, Department of Computer Science.

Nov. 2007 — *A Process Model of Rho GTP-binding Proteins*
Joint CISB Meeting, Newcastle, UK.

May 2007 — *Deep Inference in Theorem Proving*
University of Cambridge, Computer Laboratory.

Dec. 2006 — *Interaction and Depth against Nondeterminism in Proofs*
University of Birmingham, School of Computer Science.

Nov. 2005 — *Deep Inference and Nondeterminism*
Programming Systems Lab, Saarland University, Saarbrücken.

Nov. 2004 — *Implementing Deep Inference*
Protheo Group at LORIA, Nancy.

Other Papers and Talks at Conferences and Workshops

Kahramanoğulları, O., Maria Carla Benedetti, Lorenzo Bramanti
Stochastic mechanisms of growth and branching in mediterranean coral colonies
11th Conference on Dynamical Systems Applied to Biology and Natural Sciences DSABNS 2020
Trento, Italy, February 4-7, 2020.

Kahramanoğulları, O., Cansu Uluşeker, Martin M. Hanczyc.
Stochastic mechanisms of auto-regulation in *Escherichia coli* with synthetic promoter in response to varying external phosphate levels.
Italian Regional Conference on Complex Systems CCS/Italy,
FBK, Trento, July 1-3, 2019.

Kahramanoğulları, O.
Deep inference for proof search.
5th International Workshop on Structures and Deduction. Affiliated with FSCD '19.
Dortmund, Germany, June 29-30, 2019.

Kahramanoğulları, O., Martin M. Hanczyc.
Quantifying mechanisms of bacterial phosphate economy for synthetic apps.
Tenth Conference Dynamical Systems Applied to Biology and Natural Sciences DSABNS 2019
Napoli, Italy, February 3-6, 2019.

Kahramanoğulları, O., Cardelli, L.
Gener: A minimal programming module for chemical controllers based on DNA strand displacement.
SSBSS'15. International Synthetic and Systems Biology Summer School, Taormina, Sicily, Italy, July 5-9, 2015.

Kahramanoğulları, O., Lynch, J.
Stochastic Flux Analysis of Chemical Reaction Networks.
2nd Symposium on Complex Biodynamics & Networks, Tsuruoka, Japan, May 11- 13, 2015.

Kahramanoğulları, O., Lynch J.
A Theory of Model Equivalence,
Collection of essays in honor of Luca Cardelli,
Microsoft Research Technical Report, September 2014.

Kahramanoğulları, O., Jordan F., 2011,
Tutorial: *COSBILAB LIME: a language interface for stochastic dynamical modelling in ecology.*
May 30 – June 2, 7th European Conference on Ecological Modelling, Riva del Garda, Italy.

Lecca P., Kahramanoğulları, O., Morpurgo D., Priami C., Soo R., 2011,
Modelling the tumor shrinkage pharmacodynamics with BlenX,
1st IEEE International Conference on Computational Advances in Bio and medical Sciences,
February 3 – 5, Orlando, Florida, USA.

Kahramanoğulları, O., Jordan F., 2010,
Compositional stochastic modelling of dynamical ecosystems.
XX Congresso Societa Italiana di Ecologia, "Sapienza" Universita di Roma,
September 27 – 30, Rome, Italy.

Kahramanoğulları, O. , Cardelli, L., Caron, E., 2009,
An Intuitive Automated Modelling Interface for Systems Biology,
March 23–25, Noise in Life 2009, Møller Centre, Cambridge.

Kahramanoğulları, O., Cardelli, L., Caron, E., 2009,
An Intuitive Automated Modelling Interface for Systems Biology,
March 30 – April 1, BioSysBio 2009, University of Cambridge.

Kahramanoğulları, O., 2008,
Deep Inference and its Applications,
November 27, LogIC Seminar, Department of Computing, Imperial College.

Kahramanoğulları, O., 2008,
Ingredients of a Deep Inference Theorem Prover,
Proceedings of the 2nd International Workshop on Classical Logic and Computation,
CL&C'08, satellite workshop of ICALP 2008, Reykjavik, Iceland.

Kahramanoğulları, O., 2008,
Interaction and Depth against Nondeterminism in Deep Inference Proof Search,
April 11, London Theory Day, Imperial College.

Kahramanoğulları, O., 2007,
On Linear Logic Planning and Concurrency,
14th International Conference on Logic for Programming Artificial Intelligence and Reasoning,
LPAR'07, Yerevan, Armenia.

Kahramanoğulları, O., 2007,
On Concurrent Computations in Petri Nets for Modelling Signalling Pathways,
June 14– 15, Workshop on Rule-Based Modeling of Biochemical Systems,
Santa Fe Institute, New Mexico.

Kahramanoğulları, O., 2007,
Interaction and Depth against Nondeterminism in Proof Search,
April 19 – 20, Automated Reasoning Workshop 2007, Imperial College.

Kahramanoğulları, O., 2006,
Deep Inference and Nondeterminism,
October 25, London Theoretical Computer Science Seminar, King's College.

Kahramanoğulları, O., 2006,
Deepest of the Deep Inference,
July 7, Proof Theory Meeting in Bath, University of Bath.

Kahramanoğulları, O., 2005,
Nondeterminism in the Deep Inference Presentation of Classical Logic,
ICCL Workshop, Deep Inference and Proof Theory 2005,
December 14 – 15, TU Dresden, Germany.

Kahramanoğulları, O., 2005,
System BV is NP-complete,
ICCL Workshop, Proof Theory 2005, February 21 – 23, TU Dresden, Germany.

Kahramanoğulları, O., 2005,
Reducing the Non-Determinism in Proof Search in System BV,
ICCL Workshop, Proof Theory 2005, February 21 – 23, TU Dresden, Germany.

Kahramanoğulları, O., 2005,
Labeled Event Structure Semantics of Linear Logic Planning,
March 26 - April 1, 1st World Congress on Universal Logic, Montreux, Switzerland.

Kahramanoğulları, O., 2004,
Labelled Event Structure Semantics of Plans,
ICCL Workshop, Proof Theory 2004, September 27 – 28, TU Dresden, Germany.

Kahramanoğulları, O., 2004,
Using Partial Order Plans for Project Management,
Proceedings of the 12. Leipziger Informatik-Tage, Univeristy of Leipzig.

Kahramanoğulları, O., 2004,
Plans as Formulae with a Non-commutative Logical Operator,
June 17– 19, Proof, Computation, Complexity International Workshop, TU Dresden, Germany.

Kahramanoğulları, O., 2003,
From Deduction to Computation in the Calculus of Structures via Term Rewriting,
November 19 – 21, Workshop on Structural Proof Theory, TU Dresden, Germany.

Kahramanoğulları, O., Thielscher, M., 2003,
A Formal Assessment Result for Fluent Calculus Using the Action Description Language $\mathcal{A}_k$,
Proceedings of the 2003 AAAI Spring Symposium,
Logical Formalizations of Commonsense Reasoning, Stanford University, California.

Posters at Conferences

Righetti E., Kahramanoğulları, O., 2020,
Signal fidelity and robustness in Escherichia coli *phosphate response with synthetic promoters.*
11th Conference on Dynamical Systems Applied to Biology and Natural Sciences DSABNS 2020
Trento, Italy, February 4-7, 2020.

Kahramanoğulları, O., Hanczyc M. M., 2018,
Scheduling multi-armed liquid handling robot tasks by resource sensitive concurrency.
Artificial Life Conference Proceedings, 23-27 July, 2018, Tokyo.

Kahramanoğulları, O., Jordan F., 2011,
Using the compositionality feature of LIME in building a multi-network model.
May 30 – June 2, 7th European Conference on Ecological Modelling, Riva del Garda, Italy.

Lecca P., Kahramanoğulları, O., Fantaccini G., Morpurgo D., Priami C., 2011
Predicting the gemcitabine efficacy by a BlenX model.
Population Age Group Europe Meeting, June 7 – 10, Athens, Greece.

Lecca P., Kahramanoğulları, O., Morpurgo D., Priami C., 2011,
A BlenX pharmacodynamics model of tumour shrinkage by gemcitabine+carboplatin in lung cancer patients, MedChem Europe Conference, March 28 – 29, Munich, Germany.

Lecca P., Kahramanoğulları, O., Morpurgo D., Priami C., Soo R. A., 2011,
A Modelling the tumor shrinkage pharmacodynamics with BlenX,
1st IEEE International Conference on Computational Advances in Bio and medical Sciences,
February 3 – 5, Orlando, Florida, USA.

Kahramanoğulları, O., Cardelli, L., Caron, E., 2008,
An Intuitive Automated Modelling Interface for Systems Biology,
Institute of Systems and Synthetic Biology - Autumn Symposium, Imperial College.

Kahramanoğulları, O., Cardelli, L., Caron, E., Gardner, P., Phillips A., 2008,
A Process Model of Actin Polymerisation,
Synthetic Biology, Systems Biology and Bioinformatics Conference,
BioSysBio 2008, April 20–22, Imperial College.

Kahramanoğulları, O., Cardelli, L., Caron, E., Gardner, P., Phillips A., 2008,
A Process Model of Rho GTP-binding Proteins,
March 10–14, Computational and Systems Biology Course at
The Microsoft Research – University of Trento COSBI, Trento, Italy.

Kahramanoğulları, O., Cardelli, L., Caron, E., Gardner, P., Phillips A., 2007,
A Process Model of Rho GTP-binding Proteins,
The Eighth International Conference on Systems Biology, October 1–6, Long Beach, California.

Kahramanoğulları, O., 2007,
A Deductive Compositional Approach to Petri Nets for Systems Biology,
September 19–21, Computational Methods in Systems Biology, Edinburgh, UK.

Other Projects

2006	Schäfer, M., Hein, R., Kahramanoğulları, O. *Implementation of a Graphical Proof Editor – GraPE.*
2001	Kahramanoğulları, O., Thielscher, M., Masters project. *Implementation of knowledge and sensing in the Fluent Calculus for a Lego Robot in ECLiPSe Prolog and NQC.*

Participations at Summer/Spring Schools

Jul. 2015	SSBSS'15. International Synthetic and Systems Biology Summer School, July 5-9, Taormina, Sicily, Italy.
Mar. 2008	Computational and Systems Biology Course, The Microsoft Research – University of Trento COSBI, March 10–14, Trento, Italy.
Aug. 2004	16th European Summer School in Logic, Language and Information, August 9-20, Universite Henri Poincare, Nancy, France.
Aug. 2003	15th European Summer School in Logic Language and Information, August 18-29, Vienna University of Technology, Vienna, Austria.
Mar. 2002	Interdisciplinary College 2002, March 1-8, Günne at Lake Möhne, Germany.
Aug. 2001	13th European Summer School in Logic, Language and Information, August 13-24, University of Helsinki, Helsinki, Finland.
Aug. 2000	12th European Summer School in Logic, Language and Information, August 6-18, The University of Birmingham, Birmingham, UK.

References

Prof. Luca Cardelli
University of Oxford
Department of Computer Science
Wolfson Building, Parks Road
Oxford, OX1 3QD · UK
luca.a.cardelli@gmail.com
lucacardelli.name
Tel: +44 (0) 7590 688 135

Prof. Alessio Guglielmi
Department of Computer Science
University of Bath
Bath, BA2 7AY · UK
A.Guglielmi@Bath.Ac.UK
alessio.guglielmi.name
Tel: +44 (1225) 383214

Prof. James F. Lynch
Clarkson University
8 Clarkson Avenue
Potsdam, NY 13699-5815 · USA
jlynch@clarkson.edu
people.clarkson.edu/∼jlynch
Tel: +1 (315) 268-2374

Prof. Andrea Pugliese
University of Trento
Department of Mathematics
Via Sommarive 14, Trento 38123 · Italy
andrea.pugliese@unitn.it
www.science.unitn.it/∼pugliese
Tel: +39 (461) 281519