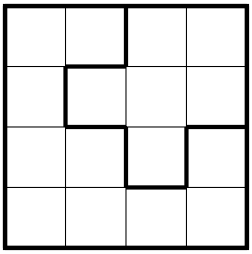
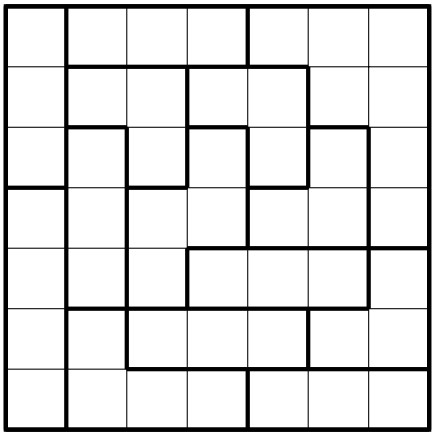
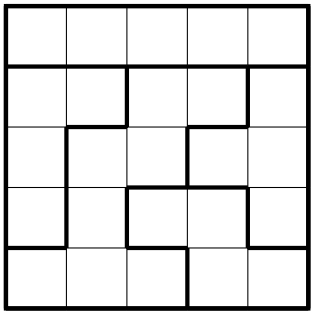
22nd International Conference on
Principles and Practice of
Constraint Programming

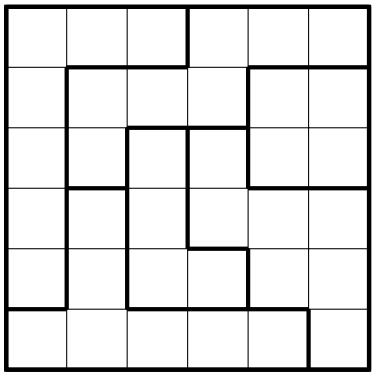
Programme

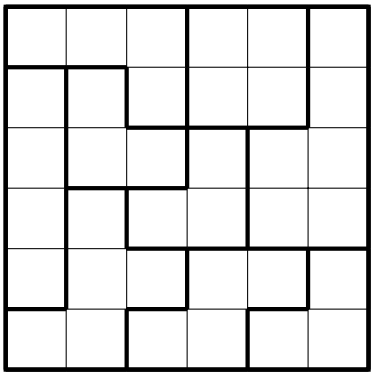
September 5–9
Toulouse, France

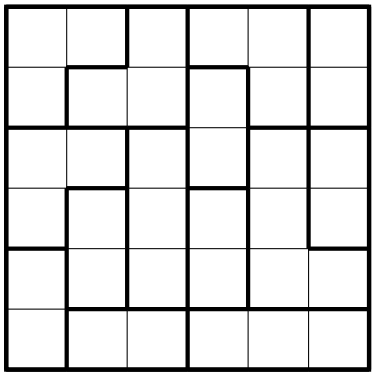












Clueless puzzle rules:
solutions are integer latin squares whose "regions" all have the same sum

`http://www.math.smith.edu/~jhenle/clueless`

Foreword

We warmly welcome you to Toulouse and the campus of the Toulouse Business School where the 22nd International Conference on Principles and Practice of Constraint Programming will take place this year. We hope you will enjoy the scientific and social programme of CP2016 with five workshops, the doctoral program, four invited talks and four tutorials, twelve technical sessions, three application sessions, three journal-first and sister conferences sessions and for the first time this year, a series of six thematic sessions on dedicated topics: verification, music, computational biology, computational sustainability, and preferences & social choice.

We would like to sincerely thank those that contributed to the organization of the conference both in the program and local organisation committees. The list of names is far too long to fit here and we invite people to visit the conference web site at cp2016.a4cp.org for details.[1]

This year the organisation relies on an informal consortium of research institutes, schools and universities from Toulouse area where CP is developed. We would like to thank all our organisations, the Toulouse Business School (TBS, our host), the Université de Toulouse, the Institut de Recherche en Informatique de Toulouse (IRIT), the Institut National des Sciences Appliquées (INSA Toulouse), the Institut National de la Recherche Agronomique (INRA, MIAT), the LAAS/CNRS (ROC team), the École des Mines d'Albi-Carmaux (EMAC), the École Nationale de l'Aviation Civile (ENAC), the Office National d'Études et de Recherche Aérospatiales (ONERA), the Institut Supérieur de l'Aéronautique et de l'Espace (ISAE-SUPAERO), and the Institut National Polytechnique (INP) for supporting us in the organisation of this event. Together, we have tried to provide you with an enjoyable event that will not only allow you to explore the edge of CP but also the blend of history, tradition and high technology of Toulouse and the Occitanie region, including its food, wines and joie de vivre!

The organizing committee

[1] Wifi login and password are inside your badge.

Doctoral programme

Monday 05 September

morning

08h15 – 09h00 Welcome

10h00 – 10h30 Coffee Break

10h30 – 12h00 Doctoral Programme Amphi Bosco

- ***Online HVAC-Aware Occupancy Scheduling with Adaptive Temperature Control***, Boon Ping Lim, Hassan Hijazi, Sylvie Thiebaux and Menkes van Den Briel
- ***Evaluation of New Branching Heuristic for Tie-breaking***, Seongsoo Moon and Mary Inaba
- ***SABIO: An Implementation of MIP and CP for Interactive Soccer Queries***, Robinson Duque, Juan Francisco Diaz and Alejandro Arbelaez
- ***Using CP and ILP with tree decomposition to solve the sum colouring problem***, Maël Minot, Samba Ndojh Ndiaye and Christine Solnon
- ***Systematic Derivation of Bounds and Glue Constraints for Time-Series Constraints***, Ekaterina Arafailova, Nicolas Beldiceanu, Mats Carlsson, Pierre Flener, Maria Andreina Francisco Rodriguez, Justin Pearson and Helmut Simonis
- ***Symbolic reasoning for constraint solvers with arrays***, Quentin Plazar, Sebastien Bardin, Arnaud Gotlieb and Mathieu Acher
- ***A Constraint Programming Approach to Multi-Robot Task Allocation and Scheduling in Retirement Homes***, Kyle E. C. Booth, Goldie Nejat and Chris Beck
- ***An Exact Algorithm for Unicost Set Covering***, Emir Demirović, Nysret Musliu, Katsumi Inoue and Théo Le Calvar
- ***Morphing between Stable Matching Problems***, Ciaran McCreesh, Patrick Prosser and James Trimble
- ***An adaptive parallel SAT solver***, Nicolas Szczepanski, Jean-Marie Lagniez, Sebastien Tabary and Gilles Audemard

12h00 – 13h30 Lunch Break

Monday 05 September

13h30 – 15h00 | Doctoral Programme | Amphi Bosco

- Invited talk: Louis-Martin Rousseau
- ***A Monte Carlo Large Neighbourhood Search for Vehicle Routing Problems***, Katharina Glock, Anne Meyer and Guido Tack
- ***Studying parallel communication strategies with POSL***, Alejandro Reyes Amaro, Eric Monfroy and Florian Richoux
- ***An Interval Filtering Operator for Upper and Lower Bounding in Constrained Global Optimization***, Olivier Sans, Remi Coletta and Gilles Trombettoni

15h00 – 15h30 | Coffee Break

15h30 – 17h30 | Doctoral Programme | Amphi Bosco

- ***A Portfolio Approach for Enforcing Minimality in a Tree Decomposition***, Daniel J. Geschwender, Robert J. Woodward, Berthe Y. Choueiry and Stephen D. Scott
- ***Mining frequent patterns using CP: a comparative study***, Valentin Lemière, Yann Dauxais, Patrice Boizumault and Arnaud Lallouet
- ***Learning parameters for the Sequence constraint from positive examples***, Emilie Picard-Cantin, Mathieu Bouchard, Claude-Guy Quimper and Jason Sweeney
- ***Constraint Programming for Strictly Convex Integer Quadratically-Constrained Problems***, Wen-Yang Ku and Chris Beck
- ***Constraint Programming For Mining Partially Ordered Motifs***, Vincent Vigneron, David Lesaint, Barry Hurley, Deepak Mehta and Barry O'sullivan
- ***A global constraint for closed itemset mining***, Nadjib Lazaar, Yahia Lebbah, Samir Loudni, Mehdi Maamar, Valentin Lemiere, Christian Bessiere and Patrice Boizumault
- ***Debugging Unsatisfiable Constraint Models***, Kevin Leo and Guido Tack
- ***A Bounded Path Propagator on Directed Graphs***, Diego de Uña, Graeme Gange, Peter Schachte and Peter J. Stuckey
- ***Multiple Constraint Acquisition***, Robin Arcangioli, Christian Bessiere and Nadjib Lazaar
- ***A DP-based MCMC Framework for Solving DCOPs with GPUs***, Ferdinando Fioretto, Enrico Pontelli and William Yeoh
- ***Synchronous Space Programming***, Pierre Talbot, Carlos Agon and Philippe Esling
- ***Clique and Constraint Models for Maximum Common (Connected) Subgraph Problems***, Ciaran McCreesh, Samba Ndojh Ndiaye, Patrick Prosser and Christine Solnon
- ***Embarrassingly Parallel Search Reengineered***, Guillaume Derval, Pierre Schaus and Jean-Charles Régin

17h45 – 18h45 | *ACP challenge* – Pierre Schaus | Grand Amphi

17h30 – 19h30 | Toulbar2 Projects Meeting | B151

- ***Brief overview of toulbar2 solver*** Simon de Givry
- ***Global cost functions (master branch) and set variables*** Jimmy H.M. Lee
- ***Using CP and ILP with tree decomposition to solve the sum colouring problem*** Maël Minot
- ***Triangle-based Consistencies for Cost Function Networks*** Hiep Nguyen
- ***Parallel strategies for Decomposition Guided VNS*** Abdelkader Ouali
- ***MiniBrass - extending MiniZinc with soft constraints*** Alexander Schiendorfer

20h00 – 23h00 | Doctoral Programme Dinner

Monday 05 September

09h00 – 17h00 Constraint-Based Methods for Bioinformatics B201

- Alessandro Dal Palù, Agostino Dovier, Andrea Formisano, Alberto Policriti, Enrico Pontelli. ***Logic Programming Applied to Genome Evolution in Cancer***
- Katinka Becker, Martin Gebser, Torsten Schaub and Alexander Bockmayr. ***Answer Set Programming for Logical Analysis of Data***

10h00 – 10h30 Coffee Break

- Louis Fippo Fitime, Olivier Roux, Carito Guziolowski and Loïc Paulevé. ***Identification of Bifurcations in Biological Regulatory Networks using Answer-Set Programming***
- Jean-Marc Alliot, Martín Diéguez and Luis Farinas del Cerro. ***Metabolic Pathways as Temporal Logic Programs***
- Martin Morterol, Philippe Dague, Sabine Peres and Laurent Simon. ***Minimality of Metabolic Flux Modes under Boolean Regulation Constraints***

12h00 – 13h30 Lunch Break

- Clément Viricel, David Simoncini, Thomas Schiex and Sophie Barbe. ***Guaranteed Weighted Counting for Affinity Computation: beyond Determinism and Structure (CP2016 paper)***
- Maryana Wånggren, Martin Billeter, and Graham Kemp. ***Computational protein modelling based on limited sets of constraints***
- Ludwig Krippahl and Pedro Barahona. ***Improving protein docking with redundancy constraints (CP2016 paper)***

15h00 – 15h30 Coffee Break

- Sebastien François, Rumen Andonov, Hristo Djidjev and Dominique Lavenier. ***Global Optimization Methods for Genome Scaffolding***
- Eric Bourreau, Annie Chateau, Clément Dallard and Rodolphe Giroudeau. ***A Graph Constraints Formulation for Contigs Scaffolding***
- WCB16 Concluding Remarks

10h30 – 16h30 Constraint Modelling and Reformulation B102

- G. Schenner and R. Taupe. ***Encoding Object-oriented Models in MiniZinc***
- K. Leo and G. Tack. ***Debugging Unsatisfiable Constraint Models***
- G. Perez and J.-C. Regin. ***Building efficient soft and cost MDD constraints***

12h00 – 13h30 Lunch Break

- W. Sawangphol, Y.-F. Li, and G. Tack. ***CP4DL: Constraint-based Reasoning for Expressive Description Logics***
- M. Codish, M. Frank, and V. Lagoon. ***DNA Word Design: A New Constraint Model and New Results***
- Z. Erraji, A. Hakkou, A. Benamrane, I. Benelallam, and El H. Bouyakhf. ***A Distributed Constraint Reasoning Approach Towards Intelligent Marketplace Environment***

15h00 – 15h30 Coffee Break

- V. Armant and K. N. Brown. ***Reformulation of Drivers' Fixed Path Constraints in Ridesharing Problems***
- S. D. Prestwich, S. A. Tarim, and R. Rossi. ***Constraint Problem Specification as Compression***

09h00 – 17h30 | CP meets Verification | B202

- Invited talk – *Challenges of Program Verification with SPARK*: ***Yannick Moy***
- ***Mixing Polyedra and Boxes Abstract Domain for Constraint Solving***, Marie Pelleau, Emmanuel Rauzy, Ghiles Ziat, Charlotte Truchet, Antoine Miné.

10h00 – 10h30 Coffee Break

- Invited talk – *Model-Constructing Satisfiabilty Calculus*: ***Dejan Jovanovic***
- Invited talk – *Optimization Modelling for Software Developers, or How to convert procedural code to constraints!*: ***Peter Stuckey***
- ***An Improved Constraint Programming Model for Parametric Interval Markov Chain Verification***, Anicet Bart, Benoît Delahaye, Éric Monfroy, Charlotte Truchet

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12h00 – 13h30 Lunch Break

- Invited talk – *Constraint Satisfaction over Bit-Vectors*: ***Laurent Michel***
- ***Tight coupling between bit-vector and integer domains can surpass bit-blasting SMT solvers***, Zakaria Chihani
- ***On Finding program input values maximizing the rounding-off error***, Mohammed Said Belaid, Claude Michel, Yahia Lebbah, Michel Rueher

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15h00 – 15h30 Coffee Break

- Invited talk – *The use of Constraint Programming in the testing and analysis of a telecommunications protocol*: ***Justin Pearson***
- Invited talk – *Network Verification: When less is more, but not always*: ***Andrey Rybalchenko***
- ***F-CPminer* : A new approach for fault localization using constraint-based data mining***, Mehdi Maamar, Noureddine Aribi, Nadjib Lazaar, Yahia Lebbah, Samir Loudni
- Discussions.

13h30 – 17h30 | CP and AI | B203

- *Introduction:* Eugene Freuder
- *Invited Talk:* ***From Constraint Programming to Probabilistic Programming to Approximate Programming: Observations and Thoughts*** Rina Dechter
- *Position paper*: ***Graphical models, an articulation point between Constraint Programming & Machine Learning*** Thomas Schiex
- *Abstract*: ***Stochastic Constraint Programming and Reinforcement Learning*** Steven Prestwich, Roberto Rossi and Armagan Tarim
- *Abstract*: ***Empirical Model Learning, and the integration of machine learning models in CP*** Tias Guns, Michele Lombardi, Michela Milano and Pascal Van Hentenryck
- *Position Paper*: ***Explanations for Human-Aware CP*** Eugene Freuder

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15h00 – 15h30 Coffee Break

- *Abstract*: ***Exact Solution Counting for Artificial Intelligence based on Decomposition of Constraint Networks*** Philippe Jégou, Hanan Kanso and Cyril Terrioux
- *Position paper*: ***Declarative Programming in Artificial Intelligence*** Siegfried Nijssen
- *Position paper*: ***Towards ethical agents in Distributed Constraints Reasoning*** Ghizlane El Khattabi, Benelallam Imade, Bouyakhf El Houssine and Rajae Haouari
- *Abstract*: ***Success Stories of CP in Data Mining*** Tias Guns
- *Position paper*: ***CP and AI — Promoting and Publicizing*** Eugene Freuder
- *Discussion*: ***Promoting and Publicizing CP for AI and CP as AI — and Vice Versa***

09h00 – 18h00 | Configuration | B104

- ***Welcome***
- ***Recommendation for product configuration: an experimental evaluation***. Hélène Fargier, Pierre-François Gimenez and Jérôme Mengin.
- ***Recommending and Configuring Smart Home Installations***. Gerhard Leitner, Alexander Felfernig, Seda Polat Erdeniz, Arda Akcay, Anthon Fercher, Klaus Isak and Michael Jeran.

10h00 – 10h30 | Coffee Break

- ***Concurrent configuration of product and process : moving towards ETO and dealing with uncertainties***. Sylla Abdourahim, Élise Vareilles, Michel Aldanondo, Thierry Coudert, Laurent Geneste and Paul Pitiot.
- ***Assessing configurator user need for social interation during the product configuration process***. Chiara Grosso, Cipriano Forza and Alessio Trentin.
- ***Improved Performance and Quality of Configuration Systems by Receiving Real-Time Information from Suppliers***. Katrin Kristjansdottir, Sara Shafiee, Martin Bonev, Lars Hvam, Morten Hugo Bennick and Christian S. Andersen.

12h00 – 13h30 | Lunch Break

- ***Deriving Tighter Component Cardinality Bounds for Product Configuration***. Richard Taupe, Andreas Falkner and Gottfried Schenner.
- ***Automatic Configuration of Hybrid Mathematical Models***. Michael Barry and René Schumann.
- ***Solving the Partner Units Configuration Problem with Heuristic Constraint Answer Set Programming***. Erich Teppan.

15h00 – 15h30 | Coffee Break

- ***Towards Group-Based Configuration***. Alexander Felfernig, Müslüm Atas, Trang Tran and Martin Stettinger.
- ***Towards Configuration Technologies for IoT Gateway***. Alexander Felfernig, Seda Polat Erdeniz, Arda Akcay, Paolo Azzoni and Charalampos Doukas.
- ***Towards Modularization and Configuration of Services – Current Challenges and Difficulties***. Thorsten Krebs and Aleksander Lubarski.
- ***Determining New Components for Open Configuration***. Linda Zhang and Xiaoyu Chen.
- Future Configuration Challenges and next Edition (CWS2017)

20h00 – 23h00 | Configuration Workshop Dinner

Workshops

Tuesday 06 September

09h00 – 12h00 | Configuration | B104

- ***Benchmark for configuration and planning optimization problems: Proposition of a generic model***. Paul Pitiot, Luis Ignacio Garcés Monge, Élise Vareilles and Michel Aldanondo.
- ***Optimal Feature Selection via Evolutionary Algorithms and Constraint Solving***. Yibo Wang and Lothar Hotz.

10h00 – 10h30 | Coffee Break

- ***Interactive Configuration of Insulating Envelopes***. Andrés Felipe Barco Santa, Élise Vareilles, Michel Aldanondo and Philippe Chantry.
- ***StudyBattles: A Learning Environment for Knowledge-based Configuration***. Alexander Felfernig, Amal Shehadeh, Christian Guetl, Michael Jeran, Trang Tran, Müslüm Atas, Seda Polat Erdeniz, Martin Stettinger, Arda Akcay and Stefan Reiterer.
- ***Finding pre-production vehicle planning using Max-SAT framework***. Marcel Tiepelt and Tilak Raj Singh.
- CWS Best Paper Award and Conclusion

Conference

Tuesday 06 September

08h00 – 08h45 Welcome coffee

08h00 – 08h45 Registration

08h45 – 09h00 *Welcome address* – Michel Rueher & Thomas Schiex Grand Amphi

09h00 – 10h00 Invited talk: *Optimizing preferences and social welfare in healthcare-related matching problems* – David Manlove Grand Amphi

10h00 – 10h30 Coffee Break

10h30 – 12h10 Application Session (1) Amphi Bosco

- Emmanuel Hebrard, Marie-José Huguet, Daniel Veysseire, Ludivine Boche Sauvan and Bertrand Cabon. ***Constraint Programming for Planning Test Campaigns of Telecommunication Satellites***
- Xavier Lorca, Charles Prud'Homme, Aurélien Questel and Benoît Rottembourg. ***Using Constraint Programming for the Urban Transit Crew Rescheduling Problem***
- Stefano Di Alesio. ***Optimal Performance Tuning in Real-Time Systems using Multi-Objective Constrained Optimization***
- Feifei Ma, Xin Gao, Minghao Yin, Linjie Pan, Jiwei Jin, Hai Liu and Jian Zhang. ***SymOptimizing Shortwave Radio Broadcast Resource Allocation via Pseudo-Boolean Constraint Solving and Local Search***

10h30 – 12h10 Technical Session (1): Theory Grand Amphi

- David Cohen and Peter Jeavons. ***The Power of Propagation: When GAC is Enough***
- Dominik Scheder, Timon Hertli, Isabelle Hurbain, Sebastian Millius, Robin Moser and May Szedlak. ***The PPSZ Algorithm for Constraint Satisfaction Problems on More Than Two Colors***
- Martin Cooper, Achref El Mouelhi and Cyril Terrioux. ***Broken Triangles, Yet Again***
- Robert Ganian, Ramanujan M. S. and Stefan Szeider. ***Backdoors to Tractable Valued CSP***

12h10 – 13h40 Lunch

13h40 – 14h40 Tutorial: *Constraint Programming in Music* – Charlotte Truchet Amphi Bosco

13h40 – 14h40 Tutorial: *Topics in Computational Sustainability* – Carla Gomes Grand Amphi

14h40 – 15h30 Music Session (1) Amphi Bosco

- Pierre Roy, Guillaume Perez, Jean-Charles Regin, Alexandre Papadopoulos, Francois Pachet and Marco Marchini. ***Enforcing Structure on Temporal Sequences: the Allen Constraint***
- Alexandre Papadopoulos, Pierre Roy and Francois Pachet. ***Assisted Lead Sheet Composition using FlowComposer***

14h40 – 15h30 Computational Sustainability Session Grand Amphi

- Yexiang Xue, Ian Davies, Daniel Fink, Christopher Wood and Carla Gomes. ***Behavior Identification in Two-stage Games for Incentivizing Citizen Science Exploration***
- Boon Ping Lim, Hassan Hijazi, Sylvie Thiebaux and Menkes Van Den Briel. ***Online HVAC-Aware Occupancy Scheduling with Adaptive Temperature Control***

15h30 – 16h00 Coffee Break

16h00 – 16h50 | Music Session (2) | Amphi Bosco

- John Hooker. ***Finding Alternative Musical Scales***
- Tsubasa Tanaka, Brian Bemman and David Meredith. ***Constraint programming formulation of the problem of generating Milton Babbitt's all-partition arrays***

16h00 – 16h50 | Technical Session (2): MaxSAT | Grand Amphi

- Jack Goffinet and Raghuram Ramanujan. ***Monte-Carlo Tree Search for the Maximum Satisfiability Problem***
- Xujie Si, Xin Zhang, Vasco Manquinho, Mikolas Janota, Alexey Ignatiev and Mayur Naik. ***On Incremental Core-Guided MaxSAT Solving***

16h50 – 17h40 | Technical Session (3): Global constraints | Grand Amphi

- Jordan Demeulenaere, Renaud Hartert, Christophe Lecoutre, Guillaume Perez, Laurent Perron, Jean-Charles Régin and Pierre Schaus. ***Compact-Table: efficiently filtering table constraints with reversible sparse bit-sets***
- Nadjib Lazaar, Yahia Lebbah, Samir Loudni, Mehdi Maamar, Valentin Lemière, Christian Bessiere and Patrice Boizumault. ***A global constraint for closed itemset mining***

16h50 – 17h40 | Journal-First and Sister Conferences Session (1): Symmetries | Amphi Bosco

- Jimmy Lee and Zichen Zhu. ***Boosting SBDS for Partial Symmetry Breaking in Constraint Programming***
- Jimmy Lee and Zichen Zhu. ***Breaking More Composition Symmetries Using Search Heuristics***

18h30 – 20h00 | Welcome Reception

20h30 – 23h00 | Executive Commitee ACP dinner

Conference

Wednesday 07 September

08h15 – 09h00 Registration

08h45 – 09h45 Invited talk: *Horn Constraints for Software Verification and Synthesis* – Andrey Rybalchenko — Grand Amphi

09h45 – 10h15 Coffee Break

10h15 – 11h15 Tutorial: *Social Choice* – Francesca Rossi, K. Brent Venable, Toby Walsh — Amphi Bosco

10h15 – 11h15 Tutorial: *Automated Program Analysis and Verification* – Andreas Podelski — Grand Amphi

11h15 – 12h05 Testing and Verification Session — Grand Amphi

- Xiaojun Sun, Irina Ilioaea, Priyank Kalla and Florian Enescu. ***Finding Unsatisfiable Cores of a Set of Polynomials using the Groebner Basis Algorithm***
- Merav Aharoni, Yael Ben-Haim, Shai Doron, Anatoly Koyfman, Elena Tsanko and Michael Veksler. ***Using Graph-Based CSP to Solve the Address Translation Problem***

11h15 – 12h05 Preferences, Social Choice, and Constraints Session — Amphi Bosco

- Ferdinando Fioretto, William Yeoh and Enrico Pontelli. ***A Dynamic Programming-based MCMC Framework for Solving DCOPs with GPUs***
- Ciaran McCreesh, Patrick Prosser and James Trimble. ***Morphing between Stable Matching Problems***

12h05 – 13h35 Lunch

13h35 – 14h50 Application Session (2) — Grand Amphi

- Vincent Goulet, Wei Li, Hyunmin Cheong, Francesco Iorio and Claude-Guy Quimper. ***Four-Bar Linkage Synthesis Using Non-Convex Optimization***
- Robinson Duque, Alejandro Arbelaez and Juan Francisco Díaz. ***SABIO: An Implementation of MIP and CP for Interactive Soccer Queries***
- Samir Sebbah, Claire Bagley, Mike Colena and Serdar Kadioglu. ***Service Availability Optimization in Cloud-Based In-Memory Data Grids***

13h35 – 14h50 Journal-First and Sister Conferences session (2): Consistencies — Amphi Bosco

- Martin Cooper and Stanislav Živný. ***The Power of Arc Consistency for CSPs Defined by Partially-Ordered Forbidden Patterns***
- Chavalit Likitvivatanavong, Wei Xia and Roland H. C. Yap. ***Decomposition of the Factor Encoding for CSPs***
- Christophe Lecoutre, Chavalit Likitvivatanavong and Roland Yap. ***STR3: A Path-Optimal Filtering Algorithm for Table Constraints***

14h50 – 15h20 Coffee Break

15h20 – 16h35	Technical Session (4): Theory	Grand Amphi

- Joshua Blinkhorn and Olaf Beyersdorff. ***Dependency Schemes in QBF Calculi: Semantics and Soundness***
- Michael Codish, Graeme Gange, Avi Itzhakov and Peter J. Stuckey. ***Breaking Symmetries in Graphs: The Nauty Way***
- David Bergman and André Augusto Ciré. ***Multiobjective Optimization by Decision Diagrams***

15h20 – 16h35	Technical Session (5): Global constraints, learning	Amphi Bosco

- Clément Carbonnel and Emmanuel Hebrard. ***Constraint Propagation via Kernelization***
- Ekaterina Arafailova, Nicolas Beldiceanu, Mats Carlsson, Pierre Flener, Maria Andreina Francisco Rodriguez, Justin Pearson and Helmut Simonis. ***Systematic Derivation of Bounds and Glue Constraints for Time-Series Constraints***
- Emilie Picard-Cantin, Mathieu Bouchard, Claude-Guy Quimper and Jason Sweeney. ***Learning parameters for the Sequence constraint from positive examples***

16h35 – 17h25	Technical Session (6): SAT	Grand Amphi

- Jeremias Berg and Matti Järvisalo. ***Impact of SAT-Based Preprocessing on Core-Guided MaxSAT Solving***
- Gilles Audemard, Jean Marie Lagniez, Nicolas Szczepanski and Sebastien Tabary. ***An adaptive parallel SAT solver***

16h35 – 17h25	Technical Session (7): Parallelism, temporal constraints	Amphi Bosco

- Anthony Palmieri, Jean-Charles Régin and Pierre Schaus. ***Parallel Strategies Selection Strategy, strategy selection, algorithm selection, parallelism***
- Luke Hunsberger and Roberto Posenato. ***A New Approach to Checking the Dynamic Consistency of Conditional Simple Temporal Networks***

17h25 – 17h40	CP'2017 & CPAIOR'2017 presentation	Grand Amphi

17h40 – 19h00	ACP General Assembly	Grand Amphi

20h00 – 23h00	Senior PC Dinner

Conference

Thursday 08 September

08h15 – 09h00 Registration

08h45 – 09h45 Invited talk: *Optimization and Control in the Smart Grid and Beyond* – Zico Kolter — Grand Amphi

09h45 – 10h15 Coffee Break

10h15 – 12h00 Best Papers — Grand Amphi

- Krishnamurthy Dvijotham, Pascal Van Hentenryck, Michael Chertkov, Sidhant Misra and Marc Vuffray. ***Graphical models for optimal power flow***
- David Manlove, Iain McBride and James Trimble. ***'Almost-stable' matchings in the Hospitals / Residents problem with Couples***
- Clément Carbonnel. ***The Dichotomy for Conservative Constraint Satisfaction is Polynomially Decidable***
- Kyle E. C. Booth, Goldie Nejat and J. Christopher Beck. ***A Constraint Programming Approach to Multi-Robot Task Allocation and Scheduling in Retirement Homes***

12h00 – 13h30 Lunch

13h30 – 14h20 CP and Biology Session — Grand Amphi

- Clément Viricel, David Simoncini, Thomas Schiex and Sophie Barbe. ***Guaranteed Weighted Counting for Affinity Computation: beyond Determinism and Structure***
- Ludwig Krippahl and Pedro Barahona. ***Improving protein docking with redundancy constraints***

13h30 – 14h20 Application Session (3) — Amphi Bosco

- Katherine Giles and Willem-Jan Van Hoeve. ***Solving a Supply-Delivery Scheduling Problem with Constraint Programming***
- David Gerault, Marine Minier and Christine Solnon. ***Constraint Programming Models for Chosen Key Differential Cryptanalysis***

14h20 – 14h45 *Doctoral Research Award* – André Augusto Ciré — Grand Amphi

14h45 – 15h00 *Distinguished Service Award* – Thomas Schiex — Grand Amphi

15h00 – 18h00 Social Program: visit of Toulouse

15h00 – 18h00 Social Program: A380 assembly line visit

20h00 – 23h30 Conference Dinner

Conference

Friday 09 September

09h00 – 10h00 | Invited talk: *Evidence-Based Optimization of Complex Infrastructures* – Pascal Van Hentenryck | Grand Amphi

10h00 – 10h30 | Coffee Break

10h30 – 11h45 | Technical Session (8): Scheduling | Grand Amphi

- Alessio Bonfietti, Michele Lombardi, Alessandro Zanarini and Michela Milano. ***The Multirate Resource Constraint***
- Andreas Schutt and Peter J. Stuckey. ***Explaining Producer/Consumer Constraints***
- Sascha Van Cauwelaert, Cyrille Dejemeppe, Jean-Noël Monette and Pierre Schaus. ***Efficient Filtering for the Unary Resource with Family-based Transition Times***

11h45 – 12h10 | MiniZinc challenge | Grand Amphi

10h30 – 12h10 | Journal-First and Sister Conferences session (3): MIP, relaxations | Amphi Bosco

- Giovanni Di Liberto, Serdar Kadioglu, Kevin Leo and Yuri Malitsky. ***DASH: Dynamic Approach for Switching Heuristics***
- Cristinca Fulga. ***AHP based portfolio selection with risk preference modeling***
- Kyle E. C. Booth, Tony T. Tran, Goldie Nejat and Chris Beck. ***Mixed-Integer and Constraint Programming Techniques for Mobile Robot Task Planning***
- Adrian Weller, Mark Rowland and David Sontag. ***Tightness of LP relaxations for almost balanced models***

12h10 – 13h40 | (Packed) Lunch

13h40 – 15h20 | Technical Session (9): Modelling, MIP | Grand Amphi

- Harsha Nagarajan, Mowen Lu, Emre Yamangil and Russell Bent. ***Tightening McCormick Relaxations for Nonlinear Programs via Dynamic Multivariate Partitioning***
- Wen-Yang Ku and Chris Beck. ***Constraint Programming for Strictly Convex Integer Quadratically-Constrained Problems***
- Ciaran McCreesh, Samba Ndojh Ndiaye, Patrick Prosser and Christine Solnon. ***Clique and Constraint Models for Maximum Common (Connected) Subgraph Problems***
- Gleb Belov, Peter Stuckey, Guido Tack and Mark Wallace. ***Improved Linearization of Constraint Programming Models***

13h40 – 15h20 | Technical Session (10): Learning, decomposition | Amphi Bosco

- Thibaut Feydy and Peter J. Stuckey. ***Interval Constraint with Learning : Application to Air Traffic Control***
- Maxim Shishmarev, Christopher Mears, Maria Garcia De La Banda and Guido Tack. ***Learning from Learning Solvers***
- Philippe Jégou, Hanan Kanso and Cyril Terrioux, ***Towards a Dynamic Decomposition of CSPs with Separators of Bounded Size***
- Diego de Uña, Graeme Gange, Peter Schachte and Peter J. Stuckey. ***A Bounded Path Propagator on Directed Graphs***

15h30 – 16h20 | Technical Session (11): SAT, SMT | Grand Amphi

- Alexey Ignatiev, Alessandro Previti and Joao Marques-Silva. ***On Finding Minimum Satisfying Assignments***
- Ozgur Akgun, Ian Gent, Christopher Jefferson, Ian Miguel and Peter Nightingale. ***Exploiting Short Supports for Improved Encoding of Arbitrary Constraints into SAT***

15h30 – 16h20 | Technical Session (12): scheduling | Amphi Bosco

- Alexander Tesch. ***A Nearly Exact Propagation Algorithm for Energetic Reasoning in $O(n^2 \cdot \log n)$***
- Ria Szeredi and Andreas Schutt. ***Modelling and Solving Multi-Mode Resource-Constrained Project Scheduling***

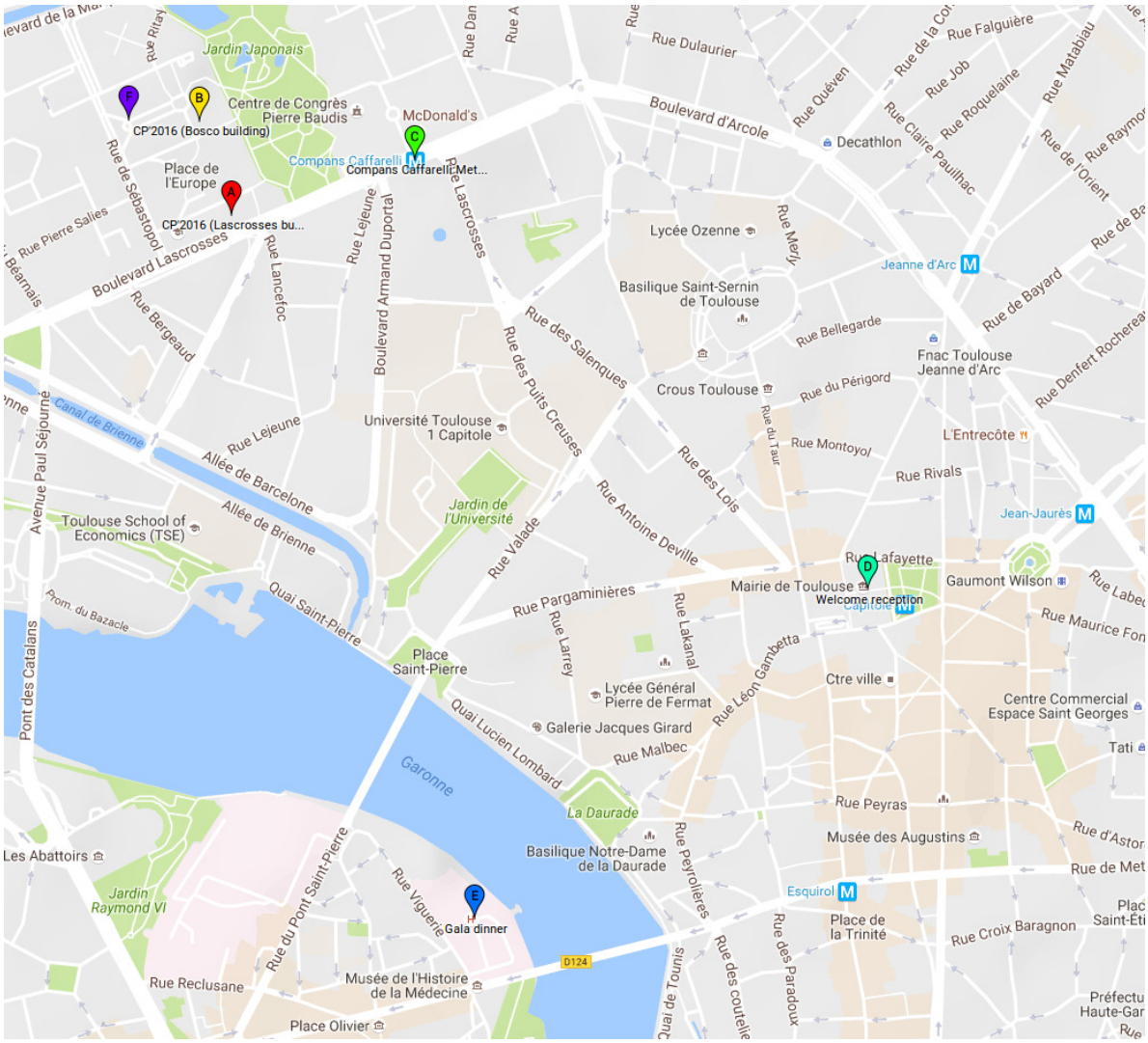
16h20 – 17h00 | Farewell coffee

Conference

Saturday 10 September

09h30 – 18h00 | CSPLib Sprint | Room 133

Useful Locations



The Events will take place in:

A Toulouse Business School: The main location of the conference (Grand Amphi).

20, Boulevard Lascrosses, GPS: 43.609515, 1.430812

B Toulouse Business School—Bosco building: The alternative location (Amphi Bosco).

Place Alphonse Jourdain — Chemin Henri Bosco, GPS: 43.611017, 1.431261

C Compans–Caffarelli: The closest subway station.

16, boulevard Lascrosses, GPS: 43.610529, 1.435420

D Town Hall: The location of the welcome reception (Tuesday).

Place du Capitole, GPS: 43.604275, 1.444961

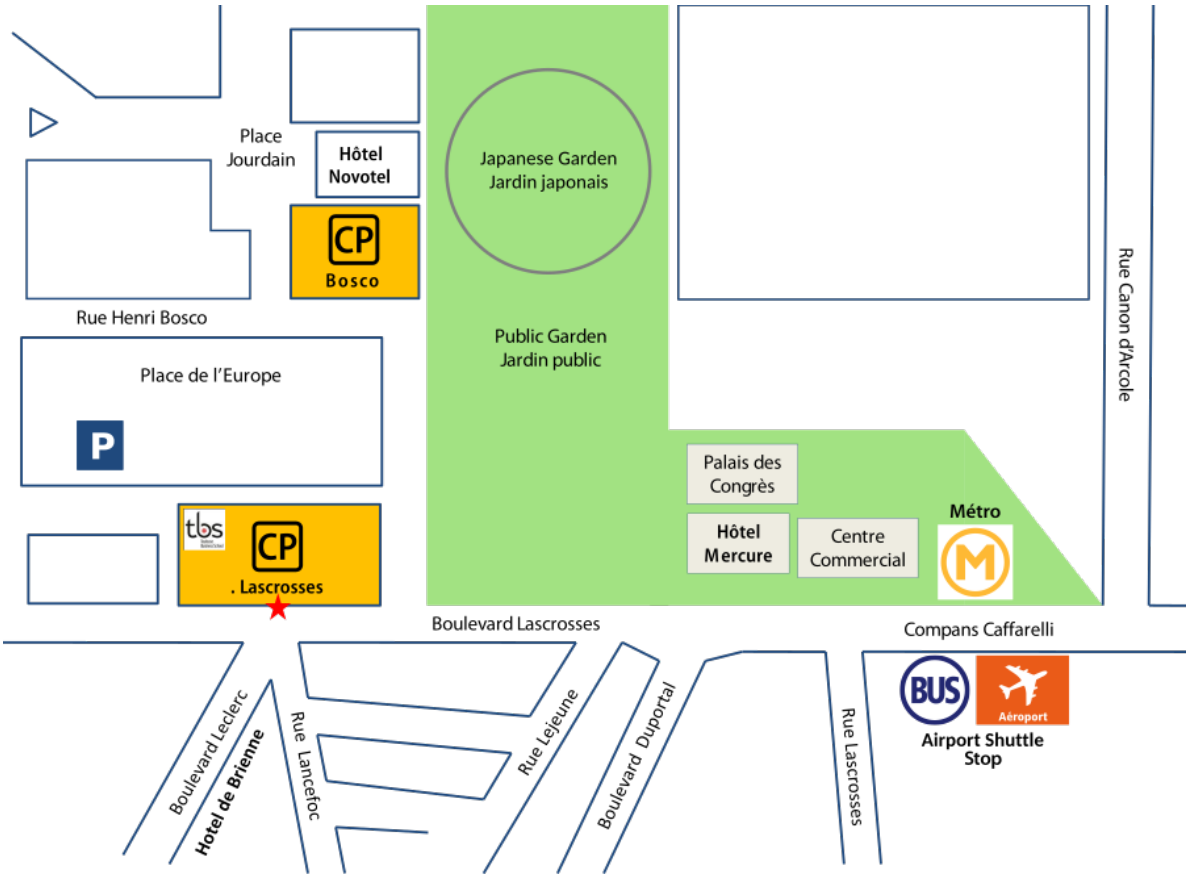
E Hôtel Dieu: The location of the gala dinner (Thursday).

2, rue Viguerie, GPS: 43.599851, 1.436506

F Place de l'Europe Car Park: The closest car park.

18, place Alphonse Jourdain, GPS: 43.61108, 1.42987

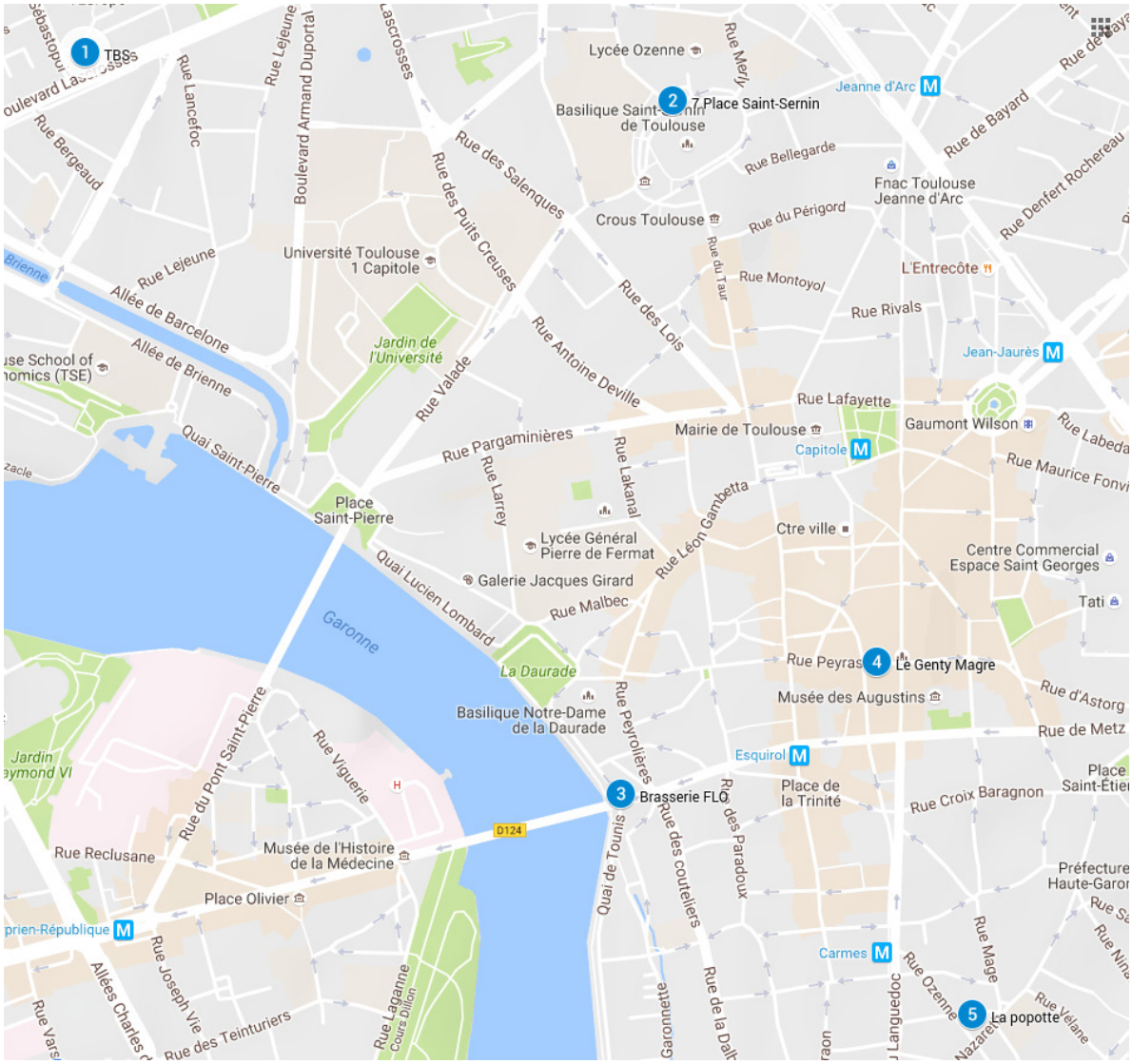
Toulouse Business School's Campus



Dinners Map

The Guide Michelin and the Fourchette (aka `thefork.com`) Web sites suggest many places for your dinners near the Conference (see the CP'16 Web site, then go to Toulouse > Accomodation for the Web links and apps).

Reserved Social Dinners will take place there:



1 Toulouse Business School: Main location of the conference.

20, Boulevard Lascrosses, GPS: 43.609515, 1.430812

2 Le 7, place Saint-Sernin: Configuration workshop dinner (Monday).

7, place Saint-Sernin, GPS: 43.60888, 1.4415

3 Brasserie FLO: Doctoral programme dinner (Monday).

1 quai de la Daurade, GPS: 43.59975, 1.44055

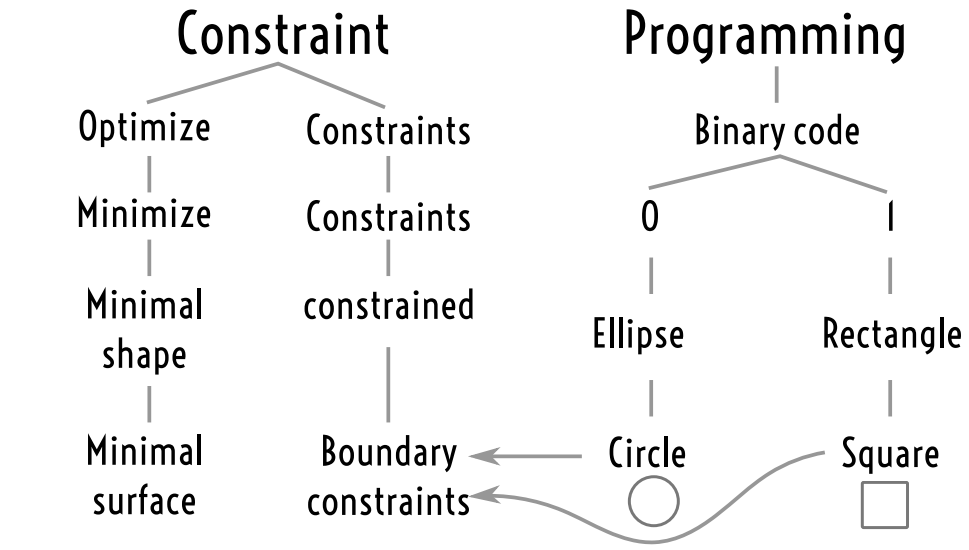
4 Le Genty Magre: ACP dinner (Tuesday).

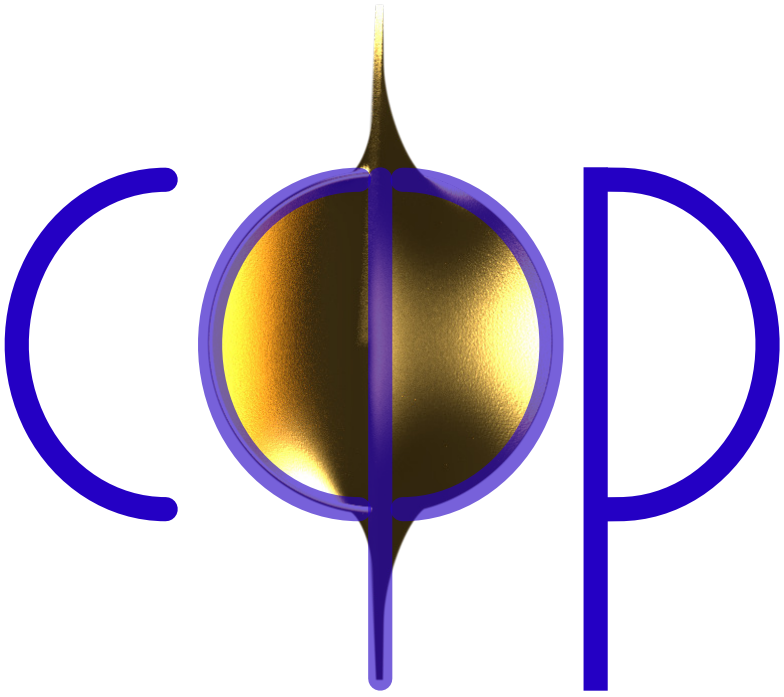
3, rue Genty Magre, GPS: 43.60149, 1.44521

5 La Popote: Senior PC dinner (Wednesday).

10, rue de la Pleau, GPS: 43.59684, 1.44696

The Genesis of the CP'2016 shape





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