Jean-Guy Mailly, Ph.D. in Computer Science

@ jean-guy.mailly@ut-capitole.fr

Manufacture des Tabacs, 21 allée de Brienne, 31042 Toulouse cedex 9

http://jgmailly.github.io/

in https://www.linkedin.com/in/jeanguymailly/



Employment History

Junior Professor, IRIT, LILaC Group, Université Toulouse Capitole

2016 – 2024 Associate Professor, LIPADE, DAI Group, Université Paris Cité

2015 – 2016 Research Assistant, Institute of Information Systems, DBAI Group, TU Wien.

2012 – 2015 Ph.D. Student, CRIL, Université d'Artois.

Education

Ph.D., Université d'Artois, Computer Science.

Thesis title: Dynamics of Argumentation Frameworks.

Supervisors: Sylvie Coste-Marquis, Sébastien Konieczny, Pierre Marquis

Defense Committee: Salem Benferhat (President), Gerhard Brewka (Reviewer), Stefan

Woltran (Reviewer), Andreas Herzig, Anthony Hunter

Master, Université d'Artois, Computer Science: Intelligent Systems and Application.

Bachelor, Université d'Artois, Mathematics and Computer Science.

Scientific Activities

Projects

Chair AIDAL: Artificial Intelligence, Data, Algorithms and Law, funded by the ANR (French National Research Agency)
 AGGREEY: An argumentation-based platform for e-democracy, funded by the ANR (French National Research Agency)
 Fragment-Drivent Belief Change, funded by the FWF (Austrian Science Fund)
 AMANDE: Advanced Multilateral Argumentation for DEliberation, funded by the ANR (French National Research Agency)

Scientific Societies

2025 - · · · ·	AFIA : Member of the board (conseil d'administration) of the French Association for Artificial Intelligence (Association Française pour l'Intelligence Artificielle)
2023 - · · · ·	ICCMA : President of the International Competition on Computational Models of Argumentation Steering Committee
2019 – 2023	ICCMA : Secretary of the International Competition on Computational Models of Argumentation Steering Committee
2018 – 2019	ICCMA : Member of the International Competition on Computational Models of Argumentation Steering Committee

Editorial Board

2021 – · · · Argument & Computation

Program Committee Member

IJCAI International Joint Conference on Artificial Intelligence: 2017, 2018, 2019, 2020, 2021 (SPC), 2022-2024 (board member), 2025

ECAI European Conference on Artificial Intelligence: 2018, 2020, 2022, 2023, 2024, 2025

AAAI AAAI Conference on Artificial Intelligence: 2018, 2020, 2021, 2022, 2023

PRICAI Pacific Rim International Conference on Artificial Intelligence: 2020

KR International Conference on Principles of Knowledge Representation and Reasoning: 2020

AAMAS International Conference on Autonomous Agents and Multiagent Systems: 2019, 2020, 2021, 2022, 2024

AAMAS-BSKY International Conference on Autonomous Agents and Multiagent Systems - Blue Sky Ideas Track: 2023 (SPC), 2025

AAMAS-DC International Conference on Autonomous Agents and Multiagent Systems - Doctoral Consortium: 2025

COMMA International Conference on Computational Models of Argument: 2016, 2018, 2020, 2022, 2024

ECSQARU European Conference on Symbolic and Quantitative Approaches to Reasoning with Uncertainty: 2025

PAIS Conference on Prestigious Applications of Intelligent Systems: 2025

KR@SAC ACM/SIGAPP Symposium On Applied Computing - Track on Knowledge Representation and Reasoning: 2018, 2019, 2020, 2021, 2022, 2023

SAFA International Workshop on Systems and Algorithms for Formal Argumentation: 2016, 2018, 2020

CLAR International Conference on Logic and Argumentation: 2021, 2023, 2025

TKR International Workshop on Trends in Knowledge Representation and Reasoning: 2025

COMSOC International Workshop on Computational Social Choice: 2023

KoDis/CAKR | Joint Workshop on Knowledge Diversity and Cognitive Aspects of KR: 2024

FCR Workshop on Formal and Cognitive Reasoning: 2022, 2023, 2024

KoDis International Workshop on Knowledge Diversity: 2023

EXTRAAMAS International Workshop on EXplainable and TRansparent Autonomous Agents and Multi-Agent Systems: 2019, 2020, 2021

IEA/AIE International Conference on Industrial, Engineering & Other Applications of Applied Intelligent Systems - Special Track on Applications of Argumentation: 2017

RJCIA Rencontres des Jeunes Chercheurs en Intelligence Artificielle: 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024

CNIA Conférence Nationale en Intelligence Artificielle: 2018

Reviewer for Journal Papers

AIJ Artificial Intelligence

JAIR Journal of Artificial Intelligence Research

A&C Argument & Computation

IJAR International Journal of Approximate Reasoning

JLC | Journal of Logic and Computation

AMAI Annals of Mathematics and Artificial Intelligence

GDN Group Decision and Negotiation

JOWS | Journal of Web Semantics

Act. Psy. Acta Psychologica

Reviewer for Conferences and Workshops

MFCS International Symposium on Mathematical Fundations of Computer Science: 2022

CIAC International Conference on Algorithms and Complexity: 2021

KR International Conference on Principles of Knowledge Representation and Reasoning: 2018

AAAI AAAI Conference on Artificial Intelligence: 2016, 2017

AAMAS International Conference on Autonomous Agents and Multiagent Systems: 2016, 2017

ECAI European Conference on Artificial Intelligence : 2014, 2016

IJCAI International Joint Conference on Artificial Intelligence: 2016

COMSOC International Workshop on Computational Social Choice: 2016

FoIKS International Symposium on Foundations of Information and Knowledge Systems:

KSEM International Conference on Knowledge Science, Engineering and Management: 2015

JELIA European Conference on Logics in Artificial Intelligence: 2014

Thesis Evaluation

2024 Member of Yann Munro's Ph.D. defense committee (Sorbonne Université, Paris)

Member of the CSI of Francesco Sabatino (Université Paris Saclay)

External reviewer of Antonio Yuste-Ginel's Ph.D. thesis (University of Malaga)

Member of Mickaël Lafages' Ph.D. defense committee (Université Paul Sabatier, Toulouse)

2020 Pre-examinator of Andreas Niskanen's Ph.D. thesis (University of Helsinki)

Events

Co-chair of the Second International Workshop on Argumentation and Applications (Arg&App 2023), Melbourne, Australia

Co-chair of the 1st European Workshop on Argumentation and Uncertainty (ArgU 2025), Hagen, Germany

Co-chair of the 19èmes Journées d'Intelligence Artificielle Fondamentale (IAF 2025), Dijon, France

Co-organizer of the Journée Argumentation et Explicabilité, Toulouse, France

Organizer of the First Workshop on Artificial Intelligence, Data, Algorithms and Law (AIDAL), Toulouse, France

Co-chair of the Fifth International Workshop on Systems and Algorithms for Formal Argumentation (SAFA 2024), Hagen, Germany

Co-chair of the 18èmes Journées d'Intelligence Artificielle Fondamentale (IAF 2024)

Co-chair of the First International Workshop on Argumentation and Applications (Arg&App 2023), Rhodes, Greece

Co-chair of the Fourth International Workshop on Systems and Algorithms for Formal 2022 Argumentation (SAFA 2022), Cardiff, UK

Chair of the Fourth International Competition on Computational Models of Argu-2021 mentation (ICCMA 2021)

Co-organizer of the Second Workshop on Argument Strength/AMANDE Project 2018 Workshop, IRIT, Toulouse, France

Co-organizer of the Workshop on New Trends in Belief Change, TU Wien, Austria 2016

Co-organizer of the Workshop on Change in Argumentation, Université d'Artois, 2015 Lens, France

Ph.D. Students

2022- · · · · Ph.D. Co-Supervisor, Thalya Fossey, Explainable and Trustable Automated Negotiation

Ph.D. Co-Supervisor, Yohann Bacquey, Strength-based Argumentation Frameworks 2020 - 2022

Internships and Mentored Projects

2025 Engeneering School Internship Co-Supervisor, Marius Pascal, IA pour la classification d'arrêts de la CJUE

Master 1 Internship Co-Supervisor, Thomas Ecobichon, Handling Exceptions in Legal Reasoning

Bachelor Internship Supervisor, Cassandre Azeau, Deep Learning for Incomplete Argumentation Frameworks

Master 2 Internship Co-Supervisor, Karla Denia Salas Jimenez, LLMs for Argument Mining

Engineering School Internship Co-Supervisor, Cesar Philippe, A Pipeline for Argument

Master 2 Research Assistant Co-Supervisor, Christina Berghegger, Context-sensitive 2024 priorities in legal argumentation

Master 1 Mentored Project Co-Supervisor, Farouk Bennai and Yanis Kouadri, Compi-2023 lation de connaissances pour l'argumentation abstraite

2022 Master 1 Mentored Project Co-Supervisor, Lamine Jau and Salah Bouchama, Argumentation for explaining machine learning approaches

Master 1 Mentored Project Co-Supervisor, Maissa Arbi and Manel Bensalem, Calcul de sémantiques graduées en argumentation

Master 1 Mentored Project Co-Supervisor, Sylvain Declercq, Quentin Januel and Christophe Yang, Portfolios de solvers SAT pour l'argumentation

Engeneering School Mentored Project Co-Supervisor, Zakariae El Asri and Killian Susini, Partage équitable de ressources : résolution et explication via l'intelligence artificielle

Bachelor Intership Co-Supervisor, Hugo Demaret, Principle-based Analysis of Rankingbased Semantics for Incomplete Argumentation Frameworks

Master 1 Mentored Project Co-Supervisor, Yanis-Fady Akroun and Lydia Bechroune, 2021 Programmation d'algorithmes permettant la fusion d'extensions en argumentation abstraite

Master 1 Mentored Project Co-Supervisor, Mohamed Azikiou and Mohand Said Nassim Hemdane, Sémantiques graduées pour des systèmes d'argumentation incomplets

Master 1 Mentored Project Supervisor, Danil Berrah and Thalya Fossey, Calcul de sémantiques graduées en argumentation

- Master 1 Mentored Project Supervisor, Namira Adjabi and Jiangang Zou, Calcul de sémantiques graduées en argumentation
- Bachelor Internship Supervisor, Eyal Cohen, Une application pour la gestion de préférences en argumentation abstraite
- 2020 Master 2 Research Intership Co-Spervisor, Imene Sai, Exploring Control Argumentation Frameworks
 - Master 1 Mentored Project Supervisor, Rachid Bellazreg and Serigne Gning, On the Impact of SAT Solvers for Reasoning with Abstract Argumentation
 - Master 1 Mentored Project Supervisor, Salomé Attar and Louis de Ferluc, Realization of Extensions in Abstract Argumentation
- Master 2 Research Intership Co-Spervisor, Fabrice Gaigner, Control Argumentation Frameworks with Probabilities
- Master 2 Research Intership Co-Spervisor, Salim Kecili, Contraintes d'ensemble dans un débat argumenté
 - Master 1 Mentored Project Supervisor, Kalidou Ba and Appolinaire Dekli, Outils pour le Raisonnement Non Monotone via la plateforme Tweety
 - DUT Internship Supervisor, Etienne Lopvet, Ajout de fonctionnalités au logiciel d'argumentation CoQuiAAS
- Master 1 Research Internship Co-Supervisor, Aurélien Lucas, Mesures d'incohérence à base d'argumentation
- Master 1 Research Internship Co-Supervisor, Oumaima Mehaibia, *Implémentation d'opérateurs de révision via SAT*

Administrative and Pedagogical Responsibilities

Past

2022 – 2024 Assistant director of the Master on Distributed Artificial Intelligence, Université Paris Cité

2019 – 2024 Member of the *conseil de laboratoire* (laboratory concil) of LIPADE, Université Paris Cité

2022 – 2023 Director of the Graduate School on Artificial Intelligence and Data Science, Université
Paris Cité

2017 – 2022 Member of the *conseil scientifique local* (local scientific concil) of the Faculty of Mathematics and Computer Science, Université Paris Cité

Member of the *comité de préfiguration facultaire* (faculty prefiguration committee) of the Faculty of Science, Université Paris Cité

Software Development

Crustabri

pygarg A Python enGine for Argumentation, see https://github.com/jgmailly/pygarg

Crustabri is a RUST ABstract argumentation Reasoner Implementation, joint work with Jean-Marie Lagniez and Emmanuel Lonca. Crustabri has received several awards during the Fifth International Competition on Computational Models of Argumentation (IC-CMA'23), being ranked first in 9 subtracks of the main track (over 13 subtracks) and 3 subtracks of the dynamic track (over 3 subtracks). See https://www.cril.univ-artois.fr/software/crustabri/

SAT-IAFs A SAT-based solver for Incomplete Argumentation Frameworks, see https://github.com/jgmailly/SAT-IAFs

Software Development (continued)

AF Merging

A tool for merging extensions of abstract argumentation frameworks, joint work with Jérôme Delobelle, see https://github.com/jeris90/fusionAF

ArgGUI

A Graphical User Interface for Abstract Argumentation, see https://sourceforge.net/projects/arggui/

CoQuiAAS

- A Constrained-based Quick Abstract Argumentation Solver, joint work with Jean-Marie Lagniez and Emmanuel Lonca. CoQuiAAS has received several awards:
 - First place at the First International Competition on Computational Models of Argumentation (ICCMA'15);
 - First place at the Second International Competition on Computational Models of Argumentation (ICCMA'17) for the GR track.
 - Second place at the Third International Competition on Computational Models of Argumentation (ICCMA'19) for the Main Track and the Dynamic Track.

Solver description: See http://www.cril.univ-artois.fr/coquiaas/

Teaching

2024 - · · · ·

Junior Professor, Université Toulouse Capitole

Toulouse School of Management. Teachings for Bachelor in Global Management: Mind, Machine and Morality. Teaching for Master MIAGE: Introduction to AI. Teaching for Master in Law and AI: Introduction to Argumentation.

2016 - 2024

Associate Professor, Université Paris Cité (formerly Paris Descartes)

Faculty of Mathematics and Computer Science. Teachings for Bachelor and Master in Computer Science

Bachelor level: Formal Languages Theory, Introduction to Artificial Intelligence, Advanced Object Oriented Programming

Master level: Non-Monotonic Reasoning, Algorithmic Complexity, Knowledge Representation and Reasoning, Automated Negotiation

Pedagogical innovation centre of Université Paris Cité. Teaching for Bachelor students in various domains: Introduction to Programming in Python

2012 - 2015

Teaching Assistant, Université d'Artois, Lens

Institute of technology of Lens. Teachings in first and second year of the DUT (Diplôme Universitaire de Technologie) on Computer Science and the DUT on Multimedia and Internet Technologies: Object Oriented Programming, Algorithmic, Documents Conception, Web Programming, Android, Databases

Research Publications

Summary

- 4 proceedings edition: SAFA (2), Arg&App (1), JIAF-JFPDA (1)
- 1 book chapter: Handbook of Formal Argumentation
- 13 journal papers: Arg&Comp (7), AIC (2), JAAMAS (1), IJAR (1), JLC (1), FLAP (1)
- 29 international conferences papers: COMMA (4), IJCAI (3), KR (3), AAMAS (3), ECSQARU (3), CLAR (3), ECAI (2), SUM (2), AAAI (1), JELIA (1), SAC (1), FoIKS (1), ICTAI (1), EUMAS (1)
- 9 international workshop papers: NMR (3), SAFA (2), Arg&App (2), TAFA (1), ACAI (1)

- 10 extended abstracts: ICCMA (8), IJCAI (1), KR(1)
- 19 national conference papers: JIAF (18), JFPC (1)

Proceedings Edition

- Borg, A., Ellmauthaler, S., **Mailly**, **J.-G.**, & Niskanen, A. (Eds.). (2024). Proceedings of the fifth international workshop on systems and algorithms for formal argumentation (SAFA'24) co-located with the 10th international conference on computational models of argument (COMMA'24), CEUR-WS.org, 3757. Retrieved from 6 http://ceur-ws.org/Vol-3757
- Mailly, J.-G., Schwartzentruber, F., & Wilczynski, A. (Eds.). (2024). Actes des 18èmes journées d'intelligence artificielle fondamentale et 19es journées francophones sur la planification, la décision et l'apprentissage pour la conduite de systèmes (JIAF-JFPDA 2024), AFIA. Retrieved from https://hal.science/AFIA/hal-04620491v1
- Cocarascu, O., Doutre, S., **Mailly**, **J.-G.**, & Rago, A. (Eds.). (2023). Proceedings of the first international workshop on argumentation and applications (Arg&App'23) co-located with the 20th international conference on principles of knowledge representation and reasoning (KR'23), CEUR-WS.org, *3472*. Retrieved from **6** https://ceur-ws.org/Vol-3472
- Gaggl, S. A., **Mailly**, **J.-G.**, Thimm, M., & Wallner, J. P. (Eds.). (2022). Proceedings of the fourth international workshop on systems and algorithms for formal argumentation (SAFA'22) co-located with the 9th international conference on computational models of argument (COMMA'22), CEUR-WS.org, 3236. Retrieved from 6 http://ceur-ws.org/Vol-3236

Book Chapters

Baumann, R., Doutre, S., **Mailly**, **J.-G.**, & Wallner, J. P. (2021b). Enforcement in formal argumentation. In D. Gabbay, M. Giacomin, G. Simari, & M. Thimm (Eds.), *Handbook of formal argumentation* (Chap. 8, pp. 159–236). College Publications.

Journal Articles

- Bistarelli, S., Kotthoff, L., Lagniez, J.-M., Lonca, E., **Mailly**, **J.-G.**, Rossit, J., ... Taticchi, C. (2025). The third and fourth international competitions on computational models of argumentation: Design, results and analysis. *Argument & Computation*, 15. To appear. 6 doi:10.3233/AAC-230013
- Mailly, J.-G. (2025a). pygarg: A Python Engine for Argumentation. Argument & Computation, 15. To appear. & doi:10.3233/AAC-230019
- Lieber, J., **Mailly**, **J.-G.**, Marquis, P., Prade, H., & Rollin, F. (2024). Some thoughts about artificial stupidity and artificial dumbness. *AI Communications*, 37(3), 377–391. 6 doi:10.3233/AIC-220322
- **Mailly**, **J.-G.** (2024b). Constrained incomplete argumentation frameworks: Expressiveness, complexity and enforcement. *AI Communications*, 37(3), 299–322. doi:10.3233/AIC-220298
- Mailly, J.-G. (2024c). Grounded semantics and principle-based analysis for incomplete argumentation frameworks. *International Journal of Approximate Reasoning*. To appear.

 Odoi:https://doi.org/10.1016/j.ijar.2024.109282
- **Mailly**, **J.-G.** (2023d). Extension-based semantics for incomplete argumentation frameworks: Properties, complexity and algorithms. *Journal of Logic and Computation*, *33*(2), 406–435.
- 7 Delobelle, J., & **Mailly**, **J.-G.** (2022). A tool for merging extensions of abstract argumentation frameworks. *Argument & Computation*, 13(3), 361–368. 6 doi:10.3233/AAC-210014
- Mailly, J.-G. (2022c). Yes, no, maybe, i don't know: Complexity and application of abstract argumentation with incomplete knowledge. *Argument & Computation*, 13(3), 291–324. Odoi:10.3233/AAC-210010

- 9 Baumann, R., Doutre, S., **Mailly**, **J.-G.**, & Wallner, J. P. (2021a). Enforcement in formal argumentation. *IfCoLog Journal of Logics and their Applications*, 8(6), 1623–1678.
- Dimopoulos, Y., **Mailly**, **J.-G.**, & Moraitis, P. (2021). Arguing and negotiating using incomplete negotiators profiles. *Autonomous Agents and Multi-Agent Systems*, *35*(2).

 6 doi:10.1007/s10458-021-09493-y
- Rossit, J., **Mailly**, **J.-G.**, Dimopoulos, Y., & Moraitis, P. (2021). United we stand: Accruals in strength-based argumentation. *Argument & Computation*, 12(1), 87–113. Odoi:10.3233/AAC-200904
- Mailly, J.-G., & Maratea, M. (2019). Assessment of benchmarks for abstract argumentation. *Argument & Computation*, 10(2), 107–112. 6 doi:10.3233/AAC-192101
- Doutre, S., & **Mailly**, **J.-G.** (2018). Constraints and changes: A survey of abstract argumentation dynamics. *Argument & Computation*, 9(3), 223–248. Odoi:10.3233/AAC-180425

International Conference Proceedings

- Doutre, S., Lagasquie-Schiex, M.-C., **Mailly**, **J.-G.**, & Yuste-Ginel, A. (2025a). Incomplete higher-order abstract argumentation frameworks. In *Sixth International Conference on Logic and Argumentation* (*CLAR 2025*). To appear.
- Fossey, T., **Mailly**, **J.-G.**, & Moraitis, P. (2025). Argument-based multi-issue negotiation. In 34th International Joint Conference on Artificial Intelligence (IJCAI 2025). To appear.
- **Mailly**, **J.-G.** (2025b). Reasoning with plausibility in incomplete argumentation frameworks. In *Proceedings of the 40th ACM/SIGAPP symposium on applied computing (SAC 2025)* (pp. 1027–1034).
- Beynier, A., **Mailly**, **J.-G.**, Maudet, N., & Wilczynski, A. (2024). Explaining the lack of locally envy-free allocations. In *Proceedings of the 27th european conference on artificial intelligence (ECAI 2024)* (pp. 3477–3484). **6** doi:10.3233/FAIA240900
- Cibier, P., & Mailly, J.-G. (2024). Graph convolutional networks and graph attention networks for approximating arguments acceptability. In *Proceedings of the 10th international conference on computational models of argument (COMMA 2024)* (pp. 25–36). Odoi:10.3233/FAIA240307
- Lagasquie-Schiex, M.-C., **Mailly**, **J.-G.**, & Yuste-Ginel, A. (2024b). How to manage supports in incomplete argumentation. In 13th International Symposium on Foundations of Information and Knowledge Systems (FoIKS 2024) (pp. 319–339). Odo:10.1007/978-3-031-56940-1_18
- Lagniez, J.-M., **Mailly**, **J.-G.**, & Lonca, E. (2024). A SAT-based approach for argumentation dynamics. In *Proceedings of the 23rd international conference on autonomous agents and multi-agent systems (AAMAS 2024)* (pp. 2351–2353).
- Delobelle, J., **Mailly**, **J.-G.**, & Rossit, J. (2023c). Revisiting approximate reasoning based on grounded semantics. In Seventeenth European Conference on Symbolic and Quantitative Approaches to Reasoning with Uncertainty (ECSQARU 2023) (pp. 71–83).
- 9 **Mailly**, **J.-G.** (2023a). A logical encoding for k-m-realization of extensions in abstract argumentation. In Fifth International Conference on Logic and Argumentation (CLAR 2023) (pp. 84–100).
- Mailly, J.-G. (2023c). Extension-based semantics for incomplete argumentation frameworks: Grounded semantics and principles. In Seventeenth European Conference on Symbolic and Quantitative Approaches to Reasoning with Uncertainty (ECSQARU 2023) (pp. 84–94).
- Bacquey, Y., **Mailly**, **J.-G.**, Moraitis, P., & Rossit, J. (2022a). Admissibility in strength-based argumentation: Complexity and algorithms. In *9th international conference on computational models of argument (COMMA 2022)* (pp. 44–55).

- Mailly, J.-G. (2022a). On incompleteness in abstract argumentation: Complexity and expressiveness. In 15th international conference on scalable uncertainty management (SUM 2022) (pp. 19–33).

 doi:10.1007/978-3-031-18843-5_2
- Gaigner, F., Dimopoulos, Y., **Mailly**, **J.-G.**, & Moraitis, P. (2021). Probabilistic control argumentation frameworks. In 20th International Conference on Autonomous Agents and Multiagent Systems (AAMAS 2021) (pp. 519–527).
- Mailly, J.-G. (2021a). Constrained incomplete argumentation frameworks. In Sixteenth European Conference on Symbolic and Quantitative Approaches to Reasoning with Uncertainty (ECSQARU 2021) (pp. 103–116).
- Mailly, J.-G. (2021c). Extension-based semantics for incomplete argumentation frameworks. In Fourth International Conference on Logic and Argumentation (CLAR 2021) (pp. 322–341).
- Mailly, J.-G. (2020b). Possible controllability of control argumentation frameworks. In 8th International Conference on Computational Models of Argument (COMMA 2020) (pp. 283–294).
- Mailly, J.-G., & Rossit, J. (2020a). Argument, I choose you! Preferences and ranking semantics in abstract argumentation. In 17th International Conference on Principles of Knowledge Representation and Reasoning (KR 2020) (pp. 647–651).
- Dimopoulos, Y., **Mailly**, **J.-G.**, & Moraitis, P. (2019a). Argumentation-based negotiation with incomplete opponent profiles. In *18th International Conference on Autonomous Agents and Multiagent Systems (AAMAS 2019)* (pp. 1252–1260).
- Dimopoulos, Y., **Mailly**, **J.-G.**, & Moraitis, P. (2018a). Control argumentation frameworks. In *32nd AAAI Conference on Artificial Intelligence (AAAI 2018)* (pp. 4678–4685).
- Doutre, S., & **Mailly**, **J.-G.** (2017a). Comparison criteria for argumentation semantics. In 15th European Conference on Multi-Agent Systems (EUMAS 2017) (pp. 219–234).
- Doutre, S., & **Mailly**, **J.-G.** (2017c). Semantic change and extension enforcement in abstract argumentation. In 11th International Conference on Scalable Uncertainty Management (SUM 2017) (pp. 194–207).
- Brewka, G., **Mailly**, **J.-G.**, & Woltran, S. (2016). Translation-based revision and merging for minimal horn reasoning. In *22nd European Conference on Artificial Intelligence (ECAI 2016)* (pp. 734–742).
- Delobelle, J., Haret, A., Konieczny, S., **Mailly**, **J.-G.**, Rossit, J., & Woltran, S. (2016). Merging of abstract argumentation frameworks. In 15th International Conference on Principles of Knowledge Representation and Reasoning (KR 2016) (pp. 33–42).
- Doutre, S., & **Mailly**, **J.-G.** (2016b). Quantifying the difference between argumentation semantics. In 6th International Conference on Computational Models of Argument (COMMA 2016) (pp. 255–262).
- Haret, A., **Mailly**, **J.-G.**, & Woltran, S. (2016a). Distributing knowledge into simple bases. In 25th International Joint Conference on Artificial Intelligence (IJCAI 2016) (pp. 1109–1115).
- Coste-Marquis, S., Konieczny, S., **Mailly**, **J.-G.**, & Marquis, P. (2015a). Extension enforcement in abstract argumentation as an optimization problem. In *24th International Joint Conference on Artificial Intelligence (IJCAI 2015)* (pp. 2876–2882).
- Lagniez, J.-M., Lonca, E., & **Mailly**, **J.-G.** (2015b). CoQuiAAS: A Constraint-based Quick Abstract Argumentation Solver. In 27th IEEE International Conference on Tools with Artificial Intelligence (ICTAI 2015) (pp. 928–935).
- Coste-Marquis, S., Konieczny, S., **Mailly**, **J.-G.**, & Marquis, P. (2014a). A translation-based approach for revision of argumentation frameworks. In 14th European Conference on Logics in Artificial Intelligence (*JELIA 2014*) (pp. 77–85).

Coste-Marquis, S., Konieczny, S., **Mailly**, **J.-G.**, & Marquis, P. (2014c). On the revision of argumentation systems: Minimal change of arguments statuses. In 14th International Conference on Principles of Knowledge Representation and Reasoning (KR 2014) (pp. 52–61).

International Workshops and Extended Abstract

- Declercq, S., Capellini, Q. J., Yang, C., Delobelle, J., & Mailly, J.-G. (2023). PORTSAT: A portfolio of sat solvers for abstract argumentation. 5th International Competition on Computational Models of Argumentation (ICCMA 2023). Retrieved from https://helda.helsinki.fi/items/7c4a0bad-0604-44c5-b5cb-1a6a487fa8af
- Delobelle, J., **Mailly**, **J.-G.**, & Rossit, J. (2023a). ARIPOTER-Degrees: ARgumentatIon apPrOximaTE Reasoning using In/Out Degrees of Arguments. 5th International Competition on Computational Models of Argumentation (ICCMA 2023). Retrieved from https://helda.helsinki.fi/items/7c4a0bad-0604-44c5-b5cb-1a6a487fa8af
- Delobelle, J., Mailly, J.-G., & Rossit, J. (2023b). ARIPOTER-hcat: ARgumentation apPrOximaTE Reasoning using h-Categorizer semantics. 5th International Competition on Computational Models of Argumentation (ICCMA 2023). Retrieved from https://helda.helsinki.fi/items/7c4a0bad-0604-44c5-b5cb-1a6a487fa8af
- Lagniez, J.-M., Lonca, E., & **Mailly**, **J.-G.** (2023). Crustabri, the evolution of CoQuiAAS. 5th International Competition on Computational Models of Argumentation (ICCMA 2023). Retrieved from **6** https://helda.helsinki.fi/items/7c4a0bad-0604-44c5-b5cb-1a6a487fa8af
- Lagniez, J.-M., Lonca, E., **Mailly**, **J.-G.**, & Rossit, J. (2023a). A new evolutive generator for graphs with communities and its application to abstract argumentation. In *First International Workshop on Argumentation and Applications* (Arg&App 2023) (Vol. 3472, pp. 52–64).
- Lagniez, J.-M., Lonca, E., **Mailly**, **J.-G.**, & Rossit, J. (2023c). Crusti_g2io, a benchmark generator based on a inner/outer template. 5th International Competition on Computational Models of Argumentation (ICCMA 2023). Retrieved from https://helda.helsinki.fi/items/7c4a0bad-0604-44c5-b5cb-1a6a487fa8af
- Mailly, J.-G. (2023b). Abstract argumentation applied to fair resources allocation: A preliminary study. In First International Workshop on Argumentation and Applications (Arg&App 2023) (Vol. 3472, pp. 85–91).
- 6 Gning, S., & Mailly, J.-G. (2020). On the impact of SAT solvers on argumentation solvers. In 3rd International Workshop on Systems and Algorithms for Formal Argumentation (SAFA 2020) (pp. 68–73).
- 9 Lagniez, J. M., Lonca, E., **Mailly**, **J.-G.**, & Rossit, J. (2020). Introducing the Fourth International Competition on Computational Models of Argumentation. In 3rd International Workshop on Systems and Algorithms for Formal Argumentation (SAFA 2020) (pp. 80–85).
- Mailly, J.-G., & Rossit, J. (2020b). Stability in Abstract Argumentation. In 18th International Workshop on Non-Monotonic Reasoning (NMR 2020).
- Rossit, J., **Mailly**, **J.-G.**, Dimopoulos, Y., & Moraitis, P. (2020b). United we stand: Accruals in strength-based argumentation (extended abstract). In *Recently Published Research Track*, 17th International Conference on Principles of Knowledge Representation and Reasoning (KR 2020).
- Lagniez, J.-M., Lonca, E., & **Mailly**, **J.-G.** (2019). CoQuiAAS v3.0: ICCMA 2019 Solver Description. 3rd International Competition on Computational Models of Argumentation (ICCMA 2019).
- Lagniez, J.-M., Lonca, E., & **Mailly**, **J.-G.** (2017). CoQuiAAS v2.0: Taking benefit from constraint programming to solve argumentation problems. 2nd International Competition on Computational Models of Argumentation (ICCMA 2017).
- Haret, A., **Mailly**, **J.-G.**, & Woltran, S. (2016b). Distributing knowledge into simple bases. In 16th International Workshop on Non-Monotonic Reasoning (NMR 2016).

- Mailly, J.-G. (2016). Using Enthymemes to Fill the Gap between Logical Argumentation and Revision of Abstract Argumentation Frameworks. In 16th International Workshop on Non-Monotonic Reasoning (NMR 2016).
- Lagniez, J.-M., Lonca, E., & **Mailly**, **J.-G.** (2015c). CoQuiAAS: Application of Constraint Programming for Abstract Argumentation. 1st International Competition on Computational Models of Argumentation (ICCMA 2015).
- Coste-Marquis, S., Konieczny, S., **Mailly**, **J.-G.**, & Marquis, P. (2013a). On the revision of argumentation systems: Minimal change of arguments status. In 2nd International Workshop on Theory and Applications of Formal Argumentation (TAFA 2013). Workshop at IJCAI 2013.
- Mailly, J.-G. (2013a). Dynamic of Argumentation Frameworks. In *Doctoral Consortium of the 23rd International Joint Conference on Artificial Intelligence (IJCAI DC 2013)*, AAAI Press / International Joint Conferences on Artificial Intelligence.
- Mailly, J.-G. (2013b). Revising Argumentation Systems: Argument Status versus Graph Minimization. ACAI Summer School 2013, Student Session (ACAI 2013).

National Conference Proceedings

- Doutre, S., Lagasquie-Schiex, M.-C., **Mailly**, **J.-G.**, & Yuste-Ginel, A. (2025b). Incomplete higher-order abstract argumentation frameworks. In 19èmes Journées d'Intelligence Artificielle Fondamentale (IAF 2025).
- Mailly, J.-G. (2025c). Systèmes d'argumentation incomplets avec plausibilité. In 19èmes Journées d'Intelligence Artificielle Fondamentale (IAF 2025).
- Delobelle, J., **Mailly**, **J.-G.**, & Rossit, J. (2024). Raisonnement approximatif pour l'acceptabilité des arguments en argumentation abstraite. In *18èmes Journées d'Intelligence Artificielle Fondamentale (IAF 2024)*.
- 4 Lagasquie-Schiex, M.-C., **Mailly**, **J.-G.**, & Yuste-Ginel, A. (2024a). Gestion des supports dans les systèmes d'argumentation incomplets. In 18èmes Journées d'Intelligence Artificielle Fondamentale (IAF 2024).
- David, V., Delobelle, J., & **Mailly**, **J.-G.** (2023). Similarity measures between order-sorted logical arguments. In 17èmes Journées d'Intelligence Artificielle Fondamentale (IAF 2023).
- 6 Lagniez, J.-M., Lonca, E., **Mailly**, **J.-G.**, & Rossit, J. (2023b). A new evolutive generator for graphs with communities and its application to abstract argumentation. In 17èmes Journées d'Intelligence Artificielle Fondamentale (IAF 2023).
- Bacquey, Y., **Mailly**, **J.-G.**, Moraitis, P., & Rossit, J. (2022b). Admissibility in strength-based argumentation: Complexity and algorithms. In *16èmes Journées d'Intelligence Artificielle Fondamentale* (*IAF 2022*).
- Lieber, J., **Mailly**, **J.-G.**, Marquis, P., Prade, H., & Rollin, F. (2022). Quelques réflexions autour de la notion de bêtise artificielle. In *16èmes Journées d'Intelligence Artificielle Fondamentale (IAF 2022*).
- 9 **Mailly**, **J.-G.** (2022b). Sémantiques à base d'extensions pour les systèmes d'argumentation incomplets. In 16èmes Journées d'Intelligence Artificielle Fondamentale (IAF 2022).
- Mailly, J.-G. (2021b). Constrained incomplete argumentation frameworks. In 15èmes Journées d'Intelligence Artificielle Fondamentale (IAF 2021).
- Rossit, J., **Mailly**, **J.-G.**, Dimopoulos, Y., & Moraitis, P. (2020a). United We Stand: Accruals in Strength-based Argumentation. In 14èmes Journées d'Intelligence Artificielle Fondamentale (IAF 2020).
- Dimopoulos, Y., **Mailly**, **J.-G.**, & Moraitis, P. (2019b). Argumentation-based Negotiation with Incomplete Opponent Profiles. In 13èmes Journées d'Intelligence Artificielle Fondamentale (IAF 2019).

- Dimopoulos, Y., **Mailly**, **J.-G.**, & Moraitis, P. (2018b). Systèmes d'argumentation à contrôle. In *12èmes Journées d'Intelligence Artificielle Fondamentale (IAF 2018)*.
- Doutre, S., & **Mailly**, **J.-G.** (2017b). Dynamique des systèmes d'argumentation : Changement de sémantique et forçage d'extension. In 11èmes Journées d'Intelligence Artificielle Fondamentale (IAF 2017).
- Doutre, S., & **Mailly**, **J.-G.** (2016a). How different are two argumentation semantics? In 10èmes Journées d'Intelligence Artificielle Fondamentale (IAF 2016).
- Coste-Marquis, S., Konieczny, S., **Mailly**, **J.-G.**, & Marquis, P. (2015b). Forçage d'extension en argumentation abstraite par optimisation booléenne. In *gèmes Journées d'Intelligence Artificielle Fondamentale (IAF 2015*).
- Lagniez, J.-M., Lonca, E., & **Mailly**, **J.-G.** (2015a). CoQuiAAS: Applications de la programmation par contraintes à l'argumentation abstraite. In 11èmes Journées Francophones de la Programmation par Contraintes (JFPC 2015) (pp. 77–85).
- Coste-Marquis, S., Konieczny, S., **Mailly**, **J.-G.**, & Marquis, P. (2014b). Approche par traduction pour la révision de systèmes d'argumentation. In *8èmes Journées d'Intelligence Artificielle Fondamentale (IAF 2014)* (pp. 77–85).
- Coste-Marquis, S., Konieczny, S., **Mailly**, **J.-G.**, & Marquis, P. (2013b). Révision de systèmes d'argumentation: Changement minimal du statut des arguments. In *7èmes Journées d'Intelligence Artificielle Fondamentale (IAF 2013)* (pp. 107–116).

Technical Reports

- Mailly, J.-G. (2024a). pygarg: A Python Engine for Argumentation (tech. rep. No. IRIT/RR-2024-02-FR). IRIT Institut de Recherche en Informatique de Toulouse. Retrieved from https://hal.science/hal-04526918
- Lagasquie-Schiex, M.-C., **Mailly**, **J.-G.**, & Yuste-Ginel, A. (2023). *Incomplete Bipolar Argumentation Frameworks* (tech. rep. No. IRIT/RR−2023−01−FR). IRIT: Institut de Recherche en Informatique de Toulouse. Retrieved from ttps://ut3-toulouseinp.hal.science/hal-04104907
- 3 Lagniez, J.-M., Lonca, E., **Mailly**, **J.-G.**, & Rossit, J. (2021). Design and results of ICCMA 2021. *CoRR*, *abs/2109.08884*. arXiv: 2109.08884. Retrieved from *𝑉* https://arxiv.org/abs/2109.08884
- Mailly, J.-G. (2020a). A note on rich incomplete argumentation frameworks. *CoRR*, *abs*/2009.04869. arXiv: 2009.04869. Retrieved from ♂https://arxiv.org/abs/2009.04869

Thesis

- Mailly, J.-G. (2015). Dynamics of Argumentation Frameworks (Doctoral dissertation, Université d'Artois).
- Mailly, J.-G. (2012). Révision de systèmes d'argumentation. Master thesis, in french. English title: Revision of Argumentation Frameworks. Université d'Artois.