# Dario Della Monica

PhD, Associate Professor (Professore Associato) Dipartimento di Scienze Matematiche, Informatiche e Fisiche (DMIF), University of Udine

Via Pradamano, 2 33100 Udine (UD) - Italy ⇒ +39 328 2477327
⊠ dario.dellamonica@uniud.it
http://users.dimi.uniud.it/~dario.dellamonica/

|                 | Personal information  |  |
|-----------------|---|--|
| surname         | Della Monica  |  |
| name            | Dario   |  |
| date of birth   | 7th August 1982   |  |
| nationality     | Italian   |  |
| gender          | Male  |  |
| home<br>address | Via Pradamano, 2 - 33100 - Udine (UD) - Italy   |  |
| work address    | Dipartimento di Scienze Matematiche, Informatiche e Fisiche (DMIF)<br>University of Udine<br>via delle Scienze, 206<br>33100 Udine, Italy |  |
| mobile          | (+39) 328 2477327   |  |
| email           | dario.dellamonica@uniud.it  |  |
| skype           | dariodellamonica  |  |
| web site        | b site http://users.dimi.uniud.it/~dario.dellamonica/   |  |

# Current academic position

Since Associate Professor (Professore Associato), University of Udine - Department November of Mathematics, Computer Science, and Physics (DMIF), Udine, Italy. 28, 2022 Research area: Formal Methods for Computer Science, Artificial Intelligence

# Academic titles

ASN 01/B1 Abilitazione Scientifica Nazionale (ASN), 01/B1 (Informatica), seconda fascia, valida dall'11/09/2019 all'11/09/2025. National Academic Qualification as Associate Professor in Computer Science https://asn18.cineca.it/pubblico/miur/esito-abilitato/01%252FB1/2/2
ASN 09/H1 Abilitazione Scientifica Nazionale (ASN), 09/H1 (Ingegneria Informatica), seconda fascia, valida dal 26/07/2018 al 26/07/2024. National Academic Qualification as Associate Professor in Computer Engineering https://asn16.cineca.it/pubblico/miur/esito-abilitato/09%252FH1/2/5
Previous academic positions

| November<br>28, 2019–<br>November<br>27, 2022 | Assistant Professor (tenure track – RTD-B), University of Udine - Department<br>of Mathematics, Computer Science, and Physics (DMIF), Udine, Italy.<br>Research area: Formal Methods for Computer Science, Artificial Intelligence   |  |
|---|--|--|
| October 1,<br>2018–<br>November<br>27, 2019   | Assistant Professor (RTD-A), University of Udine - Department of Mathematics,<br>Computer Science, and Physics (DMIF), Udine, Italy.<br>Research area: Formal Methods for Computer Science and Information Retrieval   |  |
| October<br>2016–<br>September<br>2018         | "INdAM-Marie Curie" Fellow, Istituto Nazionale di Alta Matematica (INdAM),<br>April 2018–September 2018: Research Assistant at University "Federico II" of<br>Naples - Department of Electrical Engineering and Information Technology (DIETI),<br>Naples, Italy<br>October 2016–March 2018: Research Assistant at Universidad Complutense de<br>Madrid - Sección Departamental de Sistemas Informáticos y Computación, Madrid,<br>Spain.<br>Research area: Formal Methods for System Verification |  |
| January<br>2016–<br>September<br>2016         | <b>Research Assistant</b> , University "Federico II" of Naples - Department of Electrical Engineering and Information Technology (DIETI), Naples, Italy. Research area: Formal Methods for System Verification   |  |
| March 2012–<br>December<br>2015               | <b>Research Assistant</b> , <i>Reykjavik University</i> - <i>School of Computer Science</i> , Reykjavik, Iceland.<br>Research area: Interval Temporal Logic  |  |
| February<br>2011–<br>January<br>2012          | Research Assistant, University of Salerno - Department of Computer Science, Salerno, Italy.<br>Research area: Formal Methods for Systems Verification  |  |

# Education

| January    | PhD Student in Computer Science, University of Udine - Department of Math-                   |  |  |
|------------|--|--|--|
| 2008–April | ematics and Computer Science, Udine, Italy.  |  |  |
| 2011       | Research area: Interval Temporal Logics  |  |  |
|            | Thesis title: Expressiveness, decidability, and undecidability of Interval Temporal Logic    |  |  |
| January    | "Laurea specialistica" (Master's degree) in Computer Science, University of                  |  |  |
| 2005 -     | Napoli "Federico II", Napoli, Italy, Grade: 110/100 cum laude.                               |  |  |
| October    | Area: automatic verification of software   |  |  |
| 2007       | Thesis title: Una procedura di model checking in un dominio lineare astratto per la verifica |  |  |
|            | di programmi C con array (A model checking procedure in abstract linear domain for the       |  |  |
|            | verification of C program with array)  |  |  |
| September  | "Laurea triennale" (Bachelor's Degree) in Computer Science, University of                    |  |  |
| 2001 -     | Napoli "Federico II", Napoli, Italy, Grade: 110/110.   |  |  |
| January    | Area: 3-D skeletonization process of digital image   |  |  |
| 2005       |  |  |  |

# • Phd thesis

title Expressiveness, decidability, and undecidability of Interval Temporal Logic subject Interval Temporal Logic

supervisor Angelo Montanari

- co-supervisor Guido Sciavicco and Valentin Goranko
  - note Winner of the GULP prize for the best Italian PhD dissertation in the area of Computational Logic for the years 2010-2011.
  - abstract Interval Temporal Logics are formalisms particularly suitable to express temporal properties. Unlike standard temporal logics, they use intervals, instead of points, as primitive ontological entities. The most studied propositional interval temporal logic is Halpern and Shoham's Modal Logic of Time Intervals (HS for short). It features a modal operator for each possible ordering relation between pairs of intervals (the so-called Allen's relations). HS is very expressive, but its satisfiability problem turns out to be highly undecidable (over most classes of linear orders). The three main contributions of this thesis are the following ones. First, we provide a complete classification of HS fragments with respect to their relative expressive power in the class of all linear orders. Second, we systematically investigate the decidable/undecidable status of the satisfiability problem for a number of previously unclassified HS fragments, showing that, once more, undecidability is the rule and decidability the exception. Pairing the results given here with existing ones, the long-standing goal of obtaining a complete classification of all HS fragments with respect to their satisfiability problem is now almost achieved. Third, we study metric, hybrid, and first-order extensions of Propositional Neighborhood Logic (over natural numbers), a meaningful and well-studied decidable fragment of HS.

## Master thesis

- title Una procedura di model checking in un dominio lineare astratto per la verifica di programmi C con array (A model checking procedure in abstract linear domain for the verification of C program with array)
- subject Automatic Software Verification

supervisor Massimo Benerecetti

description The thesis regarded the fomalization (with relative proof of correctness and completness) and implementation in C++ language of a new strategy of abstraction and verification absorbed in an abstraction-verification-refinement cycle (CEGAR - CounterExample Guided Abstraction Refinement), basic for Eureka tool (http://www.ai-lab.it/eureka/), for automatic verification of linear programs (in C language) with arrays.

#### Research interests

Interval Interval temporal logics are based on temporal structures where time intervals, rather Temporal than time instants, are the primitive ontological entities. The most important and Logic natural among them is the Halpern and Shoham's Interval Temporal Logic (HS, for short). It features the modal operators corresponding to the various relations between intervals, known as Allen's relations. I have mainly been working on satisfiability and expressiveness issues for (classical extensions of) HS and its fragments.

Automated Automated verification of multi-agent systems is a significant topic in the recent system literature in artificial intelligence. The need of modeling this kind of systems has verification inspired logical formalisms, the most famous being the Alternating-time Temporal

Logics, namely ATL<sup>\*</sup>, ATL<sup>+</sup>, and ATL, oriented towards the description of collective behaviors. These logics are natural specification languages for open systems, that is, systems whose behavior depends on the interaction with an external entity, usually called the environment or the opponent. I faced the problem of model checking ATLspecifications with respect to multi-agents systems (formalized as game arena) where the agents must act subject to quantitative constraints (e.g., single agents' resource availability, global energy threshold) as well as qualitative ones (expressed, e.g., by means of parity conditions).

Reactive concurrency theory

Equivalence/preorder checking is one of the main approaches to the computer-aided systems and verification of reactive systems. Systems and their specifications are both expressed in the same state-machine-based formalism, and checking whether a system correctly implements its specification amounts to verifying whether the state machines describing them are related by some suitable notion of behavioural equivalence/preorder. I have been working on a logical characterisation of several behavioural relations that have been considered in the field of concurrency theory, aiming at exploring the link between equivalence/preorder checking and another major approach to automated verification of system, namely model checking.

# Events and editorship

#### Editorship

Logical Methods in Computer Science (LMCS), Guest Editor, Special Issue of the journal Logical Methods in Computer Science (LMCS) based on a selection of papers presented at GandALF 2023.

Logical Methods in Computer Science (LMCS), Guest Editor, Special Issue of the journal Logical Methods in Computer Science (LMCS) based on a selection of papers presented at GandALF 2022.

EPTCS, Guest Editor, Proceedings of GandALF 2023.

EPTCS, Guest Editor, Proceedings of GandALF 2022.

**CEUR Workshop Proceedings**, Guest Editor, Proceedings of OVERLAY 2021.

Fundamenta Informaticae, Guest Editor, Special Issue of Fundamenta Informaticae based on a selection of papers presented at CILC 2017.

CEUR Workshop Proceedings, Guest Editor, Joint Proceedings of ICTCS 2017 and CILC 2017.

#### Program Committee Chair

GandALF 2023, 14th International Symposium on Games, Automata, Logics, and Formal Verification "GandALF 2023" (http://gandalf23.uniud.it/), September 18–20, 2023, Udine (Italy).

GandALF 2022,13th International Symposium Games, on Automata. Logics, and Formal Verification "GandALF 2022" (https://gandalf2022.software.imdea.org/), September 21-23, 2022, Madrid (Spain).

**OVERLAY 2021**, 3rd Workshop on fOrmal VERification, Logic, Automata, and sYnthesis "OVERLAY 2021" co-located with GandALF 2021 (https://overlay.uniud.it/workshop/2021/), September 22, 2021, Padova (Italy).

CILC 2017, 32nd Italian Conference on Computational Logic "CILC 2017" colocated with ICTCS 2017 (http://cilc2017.unina.it/), September 26–28, 2017, Naples (Italy).

Program Committee Membership

AI\*IA 2024, 23rd International Conference of the Italian Association for Artificial Intelligence "AI\*IA 2024" (https://aixia2024.events.unibz.it/), November 25–28, 2024, Bolzano (Italy).

GandALF 2024, 15th International Symposium on Games, Automata, Logics, and Formal Verification "GandALF 2024" (https://scool24.github.io/GandALF/), June 19–21, 2024, Reykjavik (Iceland).

IJCAI 2024, 33rd International Joint Conference on Artificial Intelligence "IJCAI 2024" (https://ijcai24.org/), August 3-9, 2024, Jeju (South Korea).

CILC 2024, 39th Italian Conference on Computational Logic "CILC 2024" (TBA), June 26–28, 2024, Rome (Italy).

AAMAS 2024, 23rd International Conference on Autonomous Multiagent Systems "AAMAS 2024" Agents and (https://www.aamas2024-conference.auckland.ac.nz/), May 6-10,2024,Auckland (New Zealand).

**OVERLAY 2023**, 5th Workshop on fOrmal VERification, Logic, Automata, and sYnthesis "OVERLAY 2023" (https://overlay.uniud.it/workshop/2023/), November, 2023, Rome (Italy).

AI\*IA 2023, 22nd International Conference of the Italian Association for Artificial Intelligence "AI\*IA 2023" (http://www.aixia2023.cnr.it/), November 6-9, 2023, Rome (Italy).

IJCAI 2023, 32nd International Joint Conference on Artificial Intelligence "IJCAI 2023" (https://ijcai-23.org/), August 19-25, 2023, Macao.

Nominated "Distinguished PC member".

CILC 2023, 38th Italian Conference on Computational Logic "CILC 2023" (https://www.programmazionelogica.it/associazione/il-convegno/cilc23/), June 21-23, 2023, Udine (Italy).

AI\*IA 2022, 21st International Conference of the Italian Association for Artificial Intelligence "AI\*IA 2022" (https://aixia2022.uniud.it/), November 28–December 2, 2022, Udine (Italy).

LAMAS&SR 2022, International Workshop on Logical Aspects in Multi-Agent Systems and Strategic Reasoning "LAMAS&SR 2022" (https://lamassr.github.io/), August 25–26, 2022, Rennes (France).

CILC 2022, 37th Italian Conference on Computational Logic "CILC 2022" (http://cilc2022.apice.unibo.it/), June 29-July 1, 2022, Bologna (Italy).

AAMAS 2022, 21st International Conference on Autonomous Agents and Multiagent Systems "AAMAS 2022" (https://aamas2022-conference.auckland.ac.nz/), May 9-13, 2022, Auckland (New Zealand). **AAAI 2022**, 36th AAAI Conference on Artificial Intelligence "AAAI 2022" (https://aaai.org/Conferences/AAAI-22/), February 22-March 1, 2022.

IJCAI 2022, 31st International Joint Conference on Artificial Intelligence "IJCAI 2022" (https://ijcai-22.org/), July 23-29, 2022, Vienna (Austria). Nominated "Distinguished PC member" (top 3%).

IJCAI 2022/2024, Member of the Program Committee Board of IJCAI for the years 2022, 2023, and 2024.

CILC 2021, 36th Italian Conference on Computational Logic "CILC 2021" (https://www.ailab.unipr.it/cilc21/), September 7-9, 2021, Parma (Italy).

IJCAI 2021, 30th International Joint Conference on Artificial Intelligence "IJCAI 2021" (https://ijcai-21.org/), August 19-26, 2021 (virtual conference).

**AAAI 2021**, 35th AAAI Conference on Artificial Intelligence "AAAI 2021" (https://aaai.org/Conferences/AAAI-21/), February 2-9, 2021 (virtual conference).

**PRIMA 2020**, 23rd International Conference on Principles and Practice of Multi-Agent Systems "PRIMA 2020" (http://uchiya.web.nitech.ac.jp/prima2020/), November 18-20, 2020 (virtual conference).

**OVERLAY 2020**, 2nd Workshop on fOrmal VERification, Logic, Automata, and sYnthesis "OVERLAY 2020" within TIME 2020 and BOSK 2020 (https://overlay.uniud.it/workshop/2020/), September 25-26, 2020, Bolzano (Italy).

AI\*IA 2020, 19th International Conference of the Italian Association for Artificial Intelligence "AI\*IA 2020" (https://aixia2020.disco.unimib.it/home), November 24-27, 2020, Milano (Italy).

CILC 2020, 35th Italian Conference on Computational Logic "CILC 2020" (https://cilc2020.demacs.unical.it/), September 24-25, 2020, Rende (Italy).

IJCAI-PRICAI 2020, 29th International Joint Conference on Artificial Intelligence and the 17th Pacific Rim International Conference on Artificial Intelligence "IJCAI-PRICAI 2020" (https://ijcai20.org/), July 11–17, 2020, Yokohama (Japan).

AAMAS 2020, 19th International Conference on Autonomous Agents and Multiagent Systems "AAMAS 2020" (https://aamas2020.conference.auckland.ac.nz/), May 9-13, 2020, Auckland (New Zealand).

**AAAI 2020**, 34th AAAI Conference on Artificial Intelligence "AAAI 2020" (https://aaai.org/Conferences/AAAI-20/), February 7-12, 2020, New York (USA).

PRIMA 2019, 22nd International Conference on Principles and Practice of Multi-Agent Systems "PRIMA 2019" (https://prima2019.di.unito.it/), October 28–31, 2019, Torino (Italy).

**OVERLAY** 2019, 1stWorkshop on fOrmal VERification, Logic, sYnthesis "OVERLAY 2019"within Automata. and AIxIA 2019 (https://overlay.uniud.it/workshop/2019/), November 19-20, 2019, Rende (Italy).

AI\*IA 2019, 18th International Conference of the Italian Association for Artificial Intelligence "AI\*IA 2019" (https://aiia2019.mat.unical.it/), November 19-22, 2019, Rende (Italy).

GandALF 2019, 10th International Symposium on Games, Automata, Logics, and Formal Verification "GandALF 2019" (https://gandalf2019.sciencesconf.org/), September 2–4, 2019, Bordeaux (France).

IJCAI 2019, 28th International Joint Conference on Artificial Intelligence "IJCAI 2019" (http://ijcai19.org/), August 10–16, 2019, Macao (China). Nominated "Distinguished PC member".

AAMAS 2019, 18th International Conference on Autonomous Agents and Multiagent Systems "AAMAS 2019" (http://aamas2019.encs.concordia.ca/), May 13– 17, 2019, Montreal (Canada).

**AAAI 2019**, 33rd AAAI Conference on Artificial Intelligence "AAAI 2019" (http://aaai.org/Conferences/AAAI-19/), January 27-February 1, 2019, Honolulu, Hawaii (USA).

AI\*IA 2018, 17th International Conference of the Italian Association for Artificial Intelligence "AI\*IA 2018" (http://aixia2018.fbk.eu/index.php/home/), November 20-23, 2018, Trento (Italy).

CILC 2018, 33rd Italian Conference on Computational Logic "CILC 2018" (https://cilc2018.events.unibz.it), September 20-22, 2018, Bolzano (Italy).

GandALF 2018, 9th International Symposium on Games, Auand Formal Verification "GandALF 2018" tomata, Logics, (https://www.react.uni-saarland.de/gandalf2018/), September 26-28, 2018, Saarbrücken (Germany).

IJCAI-ECAI 2018, 27th International Joint Conference on Artificial Intelligence and the 23rd European Conference on Artificial Intelligence "IJCAI-ECAI 2018" (https://www.ijcai-18.org/), July 13-19, 2018, Stockholm (Sweden).

LRBA 2015, ESSLLI Workshop on Logics for Resource-Bounded Agents "LRBA 2015" (http://www.cs.nott.ac.uk/~nza/lrba15/), August 10-14, 2015, Barcelona (Spain).

#### Organizing Committee Membership

AI\*IA 2022, 21st International Conference of the Italian Association for Artificial Intelligence "AI\*IA 2022", Udine (Italy), November 28–December 2, 2022, (https://aixia2022.uniud.it/).

LC 2018, Logic Colloquium 2018, Udine (Italy), 23-28 July 2018, (https://lc18.uniud.it/).

**ICTCS 2017**, 18th Italian Conference on Theoretical Computer Science "ICTCS 2017", Naples (Italy), 26-28 September 2017, (http://ictcs2017.unina.it/).

**FMAI 2017**, 1st Workshop on Formal Methods in AI "FMAI 2017", Naples (Italy), 22-24 February 2017, (https://sites.google.com/site/fmai2017homepage/).

**NWPT 2015**, 27th Nordic Workshop on Programming Theory "NWPT 2015", Reykjavik (Iceland), 21-23 October 2015, (http://icetcs.ru.is/nwpt2015/).

Madrid Meet 2015 (CONCUR/QEST/FORMATS and others), joint conference including CONCUR 2015, QEST 2015, FORMATS 2015, TGC 2015, WS-FM/BEAT 2015, and several co-located workshops, Madrid (Spain), 31 August-5 September 2015, (http://mafalda.fdi.ucm.es/madrid2015/). GandALF 2012, 3rd International Symposium on Games, Automata, Logics and Formal Verification "GandALF 2012", Napoli (Italy), 6-8 September 2012, (http://www.gandalf.unina.it/).

GandALF 2011, 2nd International Symposium on Games, Automata, Logics and Formal Verification "GandALF 2011", Minori, Amalfi Coast, Salerno (Italy), 15-17 June 2011, (http://gandalf.dia.unisa.it/2011/).

GandALF 2010, 1st International Symposium on Games, Automata, Logics and Formal Verification "GandALF 2010", Minori, Amalfi Coast, Salerno (Italy), 17-18 June 2010, (http://gandalf.dia.unisa.it/2010/).

GAMES 2009, Annual Workshop "GAMES 2009", Udine (Italy), 14-17 September 2009, (http://games2009.dimi.uniud.it/).

GAMES 2009 is part of the ESF Research Networking Programme on Games for Design and Verification (GAMES) (http://www.games.rwth-aachen.de/).

Fundings, research projects, and groups

Principal investigator of funded peer-reviewed research projects

- 2019 Principal Investigator, Formal methods for combined verification (Metodi formali per tecniche di verifica combinata).
   Italian INdAM-GNCS project. Amount of the grant: 7,000.00 EUR.
- 2017-2018 Principal Investigator, Model Rating: Enhancing model checking with information on model distance.
   INdAM-COFUND Fellowship in Mathematics and/or Applications for experienced researchers, co-funded by "Marie Curie Actions". Amount of the grant: ca. 100,000.00 EUR.
- 2013-2015 **Principal Investigator**, Decidability and Expressiveness for Interval Temporal Logics, project nr. 130802-051.

START Postdoctoral Fellowship programme, Rannis, Icelandic Research Fund, co-funded by "Marie Curie Actions". Amount of the grant: **13,320,000.00 ISK** (ca. **107,000.00 EUR**—exchange rate: Dec 2nd, 2017).

Participation in funded projects

- 2020 Ragionamento Strategico e Sintesi Automatica di Sistemi Multi-Agente. Italian INdAM-GNCS project.
- 2016 Strategic reasoning for multi-agent systems. University "Federico II" of Naples.
- 2016 Logics, Automata, and Games for Auto-Adaptive Systems. Italian INdAM-GNCS project.
- 2015 Algorithmic techniques for model checking and synthesis of safety-critical systems.

Italian INdAM-GNCS project.

2014-2015 Formal Methods for the Development and Evaluation of Sustainable Systems.

Project funded under the Programme NILS Science and Sustainability (Abel - Coordinated Mobility for Researchers), within the Priority Sectors Programme of the EEA Grants Framework.

 2014 Automata, Games, and Temporal Logics for Verification and Synthesis of Controllers in Safety-Critical Systems.
 Italian INdAM CNCS project

Italian INdAM-GNCS project.

- 2012-2013 **Processes and Modal Logics**, project nr. 100048021. Icelandic Research Fund.
  - 2011 Metodi formali per la verifica automatica di sistemi. University of Salerno.
  - 2010 Logics, Automata, and Games for Formal Verification of Complex Systems. Italian INdAM-GNCS project (http://itl.dimi.uniud.it/gncs).
  - 2008 Innovative and multi-disciplinary approaches for constraint and preference reasoning.

Italian PRIN project.

#### Participation in research groups

2018– Member of the "Data Science and Automatic Verification" laboratory. The "Data Science and Automatic Verification" laboratory (http://datasciencelab.dimi.uniud.it) is led by prof. Angelo Montanari, within the Dipartimento di Scienze Matematiche, Informatiche e Fisiche (DMIF) at University of Udine (Italy).

#### 2016–2018 Member of ASTREA.

ASTREA is the "Automated STrategic REAsoning" group, led by prof. Aniello Murano, within the Department of Electrical Engineering and Information Technology (DIETI) at University "Federico II" of Naples (Italy).

#### March 2012– Member of ICE-TCS.

December ICE-TCS is the "Icelandic Center of Excellence in Computer Science", within the School of 2015 Computer Science at Reykjavik University

#### January Member of the Eureka project.

2007– Artificial Intelligence laboratory at the University of Genova (Italy), in collaboration with October the Section of Computer Science, Physical Sciences Department, University of Napoli (Italy) 2007 "Federico II" (http://www.ai-lab.it/eureka/).

# Grant and prizes

#### Major awards

- August 2016 Winner of one of the INdAM-COFUND Fellowships in Mathematics and/or Applications for experienced researchers, co-funded by "Marie Curie Actions", administered by INdAM (Istituto Nazionale di Alta Matematica "F. Severi"—National Institute for Advanced Mathematics), for funding the project "Model Rating: Enhancing model checking with information on model distance" (2017-2018), amount of the grant: ca. 100,000.00 EUR.
- March 2013 Young researcher award for 2011, from University of Udine (Italy) for the paper "Metric Propositional Neighborhood Logics on Natural Numbers" (coauthors: D. Bresolin, A. Montanari, V. Goranko, and G. Sciavicco), Software and Systems Modeling (SoSyM) see below for publication details.
  - January Winner of the START Postdoctoral Fellowship programme, co-funded by 2013 "Marie Curie Actions", administered by Rannis through the Icelandic Research Fund (IRF), in partnership with the European Commission Framework 7 Programme (People), for funding the project nr. 130802-051 "Decidability and Expressiveness for Interval Temporal Logics" (2013-2015), amount of the grant: 13,320,000.00 ISK (ca. 107,000.00 EUR—exchange rate: Dec 2nd, 2017).

November GULP prize for the best Italian PhD dissertation in the area of Computa2012 tional Logic, for the years 2010-2011 for the PhD thesis "Expressiveness, decidability, and undecidability of Interval Temporal Logic".
GULP is the Italian Association for Logic Programming, affiliated to Association for Logic Programming (ALP).
Other awards

September IJCAI 2023 Distinguished PC member. 2023

September IJCAI 2022 Distinguished PC member (top 3%). 2022

June 2019 IJCAI 2019 Distinguished PC member.

- August 2014 ECCAI travel grant, to attend the 21st European Conference on Artificial Intelligence (ECAI 2014).
  - May 2014 **Best paper award**, for the paper "First steps towards automated synthesis of tableau systems for interval temporal logics" (coauthors: A. Montanari, G. Sciavicco, and D. Tishkovsky), 5th International Conference on Computational Logics, Algebras, Programming, Tools, and Benchmarking (COMPUTATION TOOLS 2014) see below for publication details.
- August 2012 ECCAI travel grant, to attend the 20th European Conference on Artificial Intelligence (ECAI 2012).
- August 2010 ECCAI travel grant, to attend the 19th European Conference on Artificial Intelligence (ECAI 2010).

# Teaching and supervision

Teaching at undergraduate and graduate level

| 2024 - 2025  | Programming and Laboratory (in Italian), University of Udine, Bachelor course. |  |
|--------------|--|--|
| (1st and 2nd |  |  |
| period)      |  |  |
| 2023 - 2024  | Advanced Database Systems (in English), University of Udine and University     |  |
| (2nd period) | of Trieste, Master course.   |  |
| 2023 - 2024  | Programming and Laboratory (in Italian), University of Udine, Bachelor course. |  |
| (1st and 2nd |  |  |
| period)      |  |  |
| 2022 - 2023  | Advanced Database Systems For Big Data/Data Management for Big Data            |  |
| (2nd period) | (in English), University of Udine and University of Trieste, Master course.    |  |
| 2022 - 2023  | Programming and Laboratory (in Italian), University of Udine, Bachelor course. |  |
| (1st and 2nd |  |  |
| period)      |  |  |
| 2022 - 2023  | Database Laboratory (in Italian), University of Udine, Bachelor course.        |  |
| (1st period) |  |  |
| 2021 - 2022  | Advanced Database Systems For Big Data/Data Management for Big Data            |  |
| (2nd period) | (in English), University of Udine and University of Trieste, Master course.    |  |
| 2021 - 2022  | Database Laboratory (in Italian), University of Udine, Bachelor course.        |  |
| (1st period) |  |  |

| 2020-2021   | Advanced Database Systems For Big Data/Data Management for Big Data  |  |  |
|---|--|--|--|
| (2nd period)  | (in English), University of Udine and University of Trieste, Master course.  |  |  |
| 2020-2021   | Database Laboratory (in Italian), University of Udine, Bachelor course.  |  |  |
| (1st period)  |  |  |  |
| 2019-2020   | Data Management for Big Data (in English), University of Udine and University  |  |  |
| (2nd period)  | of Trieste, Master course.   |  |  |
| 2019-2020 (1st period)  | Database Laboratory (in Italian), University of Udine, Bachelor course.  |  |  |
| 2018–2019<br>(2nd period)   | <b>Data Management for Big Data (in English)</b> , University of Udine and University of Trieste, Master course.   |  |  |
| 2018–2019<br>(1st period)   | Database Laboratory (in Italian), University of Udine, Bachelor course.  |  |  |
| 2014–2015<br>(2nd period)   | Programming Languages (in English), Reykjavik University, Bachelor course.   |  |  |
| January<br>2009–May<br>2011   | Advanced Laboratory of Databases and Information Systems (in Italian),<br>University of Udine, Bachelor course.  |  |  |
|   | Summer schools   |  |  |
| August Theory of complexity (in Italian), Palazzo Feltrinelli, Gargnano, 19–24, 2024 Scuola estiva di logica. |  |  |  |
|   | Teaching at Professional Master's Programmes (Master italiani di I e II livello)   |  |  |
| 2019–2020<br>(2nd period)   | Data Management for Big Data (in Italian), University of Udine, Master di I livello in Filosofia del Digitale (modulo: <i>Gli strumenti del digitale</i> ).  |  |  |
|   | Student (co-)supervision   |  |  |
| PhD theses  | University of Udine (Italy): Angelo Matteo.  |  |  |
| Master<br>theses  | University of Udine (Italy): Ionel Eduard Stan<br>University of Udine and University of Trieste (Italy): Paolo Pulcini, Nicolas<br>Solomita, Alex Fulgosi.   |  |  |
| Bachelor  | University of Udine (Italy): Andrea Martin, Mattia Guiotto, Chiara Sequalini,  |  |  |
| theses  | Lorenzo Mian, Alessandra Tracanelli, Kalaja Klajdi, Raimondo Barbuto, Fabio Lena,<br>Matteo Zof, Xavier Zentilin, Lorenzo Marcon, Emanuele D'Agostini.<br><b>University of Salerno (Italy):</b> Luigi D'Amora. |  |  |
| Undergraduat<br>project   | e <b>Tómas Ken Magnússon</b> , Enumeration algorithms for modal logics, Horn theories, and hyper-graphs, Reykjavik University, Iceland.  |  |  |
| supervision   |  |  |  |

# Other experiences

#### Extra-academic talks and seminars

25 May 2016 **Dissemination seminar**, La mente tra logica e percezione: Ragionamento cognitivo e ragionamento simbolico (in Italian—English translation: Mind between logic and perception: Cognitive and symbolic reasoning), seminar within the international educational event "Pint of Science 2016", held at club "U-Turn Piano B", vico Pallonetto Santa Chiara, 15, Napoli (Italy).

#### Miscellaneous

| May 2017                     | <b>Research visiting Period</b> , <i>University of Malta - Malta</i> , Research collaboration.<br>Visiting period c/o professor Adrian Francalanza at University of Malta - Malta for research   |  |  |  |
|------------------------------|--|--|--|--|
| September<br>2015–           | collaboration.<br><b>Research visiting Period</b> , Universidad Complutense de Madrid - Spain, Research collaboration.   |  |  |  |
| November<br>2015             | Visiting period c/o professor David de Frutos Escrig at Universidad Complutense de Madrid - Madrid - Spain for research collaboration.   |  |  |  |
| April                        | Research visiting Period, Universidad Complutense de Madrid - Spain, Research  |  |  |  |
| 2014–June<br>2014            | Conadoration.<br>Visiting period c/o professor David de Frutos Escrig at Universidad Complutense de Madri<br>- Madrid - Spain for research collaboration.  |  |  |  |
| April                        | Research visiting Period, University of Murcia - Spain, Research collaboration.  |  |  |  |
| 2013–June<br>2013            | Visiting period c/o professor Guido Sciavicco at University of Murcia - Departamento de Ingenieria de la Información y las comunicaciones - Murcia - Spain for research collaboration.   |  |  |  |
| September<br>2010–           | <b>Research visiting period</b> , <i>Technical University of Denmark (DTU)</i> , <i>Lyngby, Copenhagen - Denmark</i> , Research collaboration.   |  |  |  |
| November<br>2010             | Visiting period c/o professor Valentin Goranko at Section Algorithms and Logic - Department<br>of Informatics and Mathematical Modelling (IMM) - Technical University of Denmark (DTU),<br>Lyngby, Copenhagen (Denmark) for research collaboration.  |  |  |  |
| Since                        | Webmaster.   |  |  |  |
| February<br>2010             | Webmaster of the website http://itl.dimi.uniud.it/gncs (developed in Drupal) about a GNCS project I am involved in.  |  |  |  |
| October<br>2009–<br>December | <b>Research visiting Period</b> , <i>University of Murcia - Spain</i> , Research collaboration.<br>Visiting period c/o professor Guido Sciavicco at University of Murcia - Departamento de<br>Ingenieria de la Información y las comunicaciones - Murcia - Spain for research collaboration. |  |  |  |
| 2009                         |  |  |  |  |
| Since March                  | Webmaster.   |  |  |  |
| 2009                         | http://itl.dimi.uniud.it/ (develope  | Interval Temporal Logic (a major research topic of mine)<br>ed in Drupal). |  |  |
| February<br>2005–June        | <b>Programmer</b> , Napoli, Italy.   | sustamors (suppliers management for a business agent. Pro                  |  |  |
| 2005–5 une<br>2005           | Implementation of a program for customers/suppliers management for a business agent. Program implemented using the following languages: html, php, javascript, SQL.  |  |  |  |
| December<br>2003–            | Programmer, "EDISUD" Pub   | blishing House, Salerno, Italy.  |  |  |
| February<br>2004             | Implementation of a DataDase for   | customers/suppliers management for a publishing house.                     |  |  |
|                              | Artistic performances  |  |  |  |
| May 2014                     | <b>Background actor</b> , in the Icelandic film <i>Life in a Fishbowl</i> .<br>http://www.imdb.com/title/tt2172554/  |  |  |  |
| September<br>2010            | <b>Scriptwriter</b> , Co-scriptwriter of the short film <i>Tempo finito!</i> ( <i>Time over!</i> ), Gruppo Teatrale Universitario (GTU), University of Udine, Italy.   |  |  |  |
|                              | Languages  |  |  |  |
| Italian                      | Native   |  |  |  |
| English                      | Fluent   | Several life and work experiences abroad                                   |  |  |
| Spanish                      | Fluent   | Several life and work experiences in Spain                                 |  |  |

#### Two years at High School

French Beginner

## Computer skills

OS Linux, Unix, Windows

programming JAVA, C/C++, Prolog, Lisp, SQL, PHP, JSP

web design HTML, XHTML, CSS, Drupal

administration Tomcat, Apache

scripting Javascript

typography I₄T<sub>E</sub>X, BibTeX database MySQL

verification NuSMV tool

# Personal skills

social Good relationship in the group work.

organizational Planning capacities to work in team and analytical skills.

technical Computer programming, neural network, automatic software verification, logics.

driving B license

# Interests

Football (playing it more than watching it), music, cinema, inter-personal relationships.

# Publications

- Renato Acampora, Dario Della Monica, Luca Geatti, Nicola Gigante, and Angelo Montanari. Synthesis of timeline-based planning strategies avoiding determinization. In Proc. of the 15th International Symposium on Games, Automata, Logics and Formal Verification (GandALF), 2024.
- [2] Antonis Achilleos and Dario Della Monica, editors. Proceedings of the 14th International Symposium on Games, Automata, Logics and Formal Verification (GandALF), volume 390 of EPTCS. Open Publishing Association, 2023.
- [3] Dylan Bellier, Massimo Benerecetti, Dario Della Monica, and Fabio Mogavero. Alternating (In)Dependence-Friendly Logic. Annals of Pure and Applied Logic, page 103315, 2023.
- [4] Andrea Brunello, Dario Della Monica, Angelo Montanari, Nicola Saccomanno, and Andrea Urgolo. Monitors that learn from failures: Pairing STL and genetic programming. *IEEE Access*, pages 1–1, 2023. Online since May 2023.
- [5] Dario Della Monica, Angelo Montanari, and Pietro Sala. An interval temporal logic characterization of extended omega-regular languages. *Theoretical Computer Science* (TCS), 2023.
- [6] Dario Della Monica, Angelo Montanari, Gabriele Puppis, and Pietro Sala. The logic of prefixes and suffixes is elementary under homogeneity. In *Proceedings of the 38th*

Annual ACM/IEEE Symposium on Logic in Computer Science (LICS), pages 1–12, 2023.

- [7] Willem Conradie, Dario Della Monica, Emilio Muñoz-Velasco, Guido Sciavicco, and Ionel Eduard Stan. Fuzzy Halpern and Shoham's interval temporal logics. *Fuzzy Sets* and Systems, 456:107–124, 2023. Available online since 24 May 2022.
- [8] Dylan Bellier, Massimo Benerecetti, Dario Della Monica, and Fabio Mogavero. Goodfor-game QPTL: An alternating Hodges semantics. ACM Trans. Comput. Logic (ToCL), 24(1), jan 2023.
- [9] Pierre Ganty and Dario Della Monica, editors. Proceedings of the 13th International Symposium on Games, Automata, Logics and Formal Verification (GandALF), volume 370 of EPTCS. Open Publishing Association, 2022.
- [10] Dario Della Monica, Gian Luca Pozzato, and Enrico Scala, editors. Proceedings of the 3rd Workshop on Artificial Intelligence and Formal Verification, Logic, Automata, and Synthesis (OVERLAY), volume 2987 of CEUR Workshop Proceedings. CEUR-WS.org, 2021.
- [11] Dario Della Monica, Aniello Murano, and Luigi Sauro, editors. Preface, volume 176 of Fundam. Informaticae, 2020.
- [12] Dario Della Monica, Nicola Gigante, Salvatore La Torre, and Angelo Montanari. Complexity of qualitative timeline-based planning. In Emilio Muñoz-Velasco, Ana Ozaki, and Martin Theobald, editors, Proc. of the 27th International Symposium on Temporal Representation and Reasoning (TIME), volume 178 of Leibniz International Proceedings in Informatics (LIPIcs), pages 16:1–16:13. Schloss Dagstuhl-Leibniz-Zentrum für Informatik, 2020.
- [13] Willem Conradie, Dario Della Monica, Emilio Muñoz-Velasco, and Guido Sciavicco. An approach to fuzzy modal logic of time intervals. In Proc. of the 24th European Conference on Artificial Intelligence (ECAI), volume 325 of Frontiers in Artificial Intelligence and Applications, pages 696–703, 2020.
- [14] David Barozzini, David de Frutos-Escrig, Dario Della Monica, Angelo Montanari, and Pietro Sala. Beyond  $\omega$ -regular languages:  $\omega T$ -regular expressions and their automata and logic counterparts. *Theoretical Computer Science*, 813:270–304, 2020.
- [15] D. Della Monica, A. Montanari, A. Murano, and G. Sciavicco. Ultimately-periodic interval model checking for temporal dataset evaluation. In Diego Calvanese and Luca Iocchi, editors, Proc. of the 5th Global Conference on Artificial Intelligence (GCAI), volume 65 of EPiC Series in Computing, pages 28–41. EasyChair, 2019.
- [16] D. Bresolin, D. Della Monica, A. Montanari, P. Sala, and G. Sciavicco. Decidability and complexity of the fragments of the modal logic of Allen's relations over the rationals. *Information and Computation*, 2019. Available online since 4 March 2019.
- [17] Luca Aceto, Dario Della Monica, Ignacio Fábregas, and Anna Ingólfsdóttir. When are prime formulae characteristic? *Theoretical Computer Science*, 777:3–31, 2019. Available online since 6 December 2018.
- [18] D. Della Monica, N. Gigante, A. Montanari, and P. Sala. A novel automata-theoretic approach to timeline-based planning. In Michael Thielscher, Francesca Toni, and

Frank Wolter, editors, Proc. of the 16th International Conference on Principles of Knowledge Representation and Reasoning (KR), pages 541–550. AAAI Press, 2018.

- [19] D. Della Monica and A. Murano. Parity-energy ATL for Qualitative and Quantitative Reasoning in MAS. In Proc. of the 17th International Conference on Autonomous Agents and MultiAgent Systems (AAMAS), pages 1441–1449, Stockholm, Sweden, 2018.
- [20] Dario Della Monica, Aniello Murano, Sasha Rubin, and Luigi Sauro, editors. Joint Proceedings of the 18th Italian Conference on Theoretical Computer Science (ICTCS) and the 32nd Italian Conference on Computational Logic (CILC), volume 1949 of CEUR Workshop Proceedings. CEUR-WS.org, 2017.
- [21] D. Della Monica, N. Gigante, A. Montanari, P. Sala, and G. Sciavicco. Bounded timed propositional temporal logic with past captures timeline-based planning with bounded constraints. In Carles Sierra, editor, Proc. of the 26th International Joint Conference on Artificial Intelligence (IJCAI), pages 1008–1014, Melbourne, Australia, August 2017. ijcai.org.
- [22] Adrian Francalanza, Luca Aceto, Antonis Achilleos, Duncan Paul Attard, Ian Cassar, Dario Della Monica, and Anna Ingólfsdóttir. A foundation for runtime monitoring. In Shuvendu K. Lahiri and Giles Reger, editors, Proc. of the 17th International Conference on Runtime Verification (RV), volume 10548 of Lecture Notes in Computer Science, pages 8–29, Seattle, WA, USA, September 2017. Springer.
- [23] Dario Della Monica, David de Frutos-Escrig, Angelo Montanari, Aniello Murano, and Guido Sciavicco. Evaluation of temporal datasets via interval temporal logic model checking. In Sven Schewe, Thomas Schneider, and Jef Wijsen, editors, Proc. of the 24th International Symposium on Temporal Representation and Reasoning (TIME), volume 90 of LIPIcs, pages 11:1–11:18, Mons, Belgium, October 2017. Schloss Dagstuhl - Leibniz-Zentrum fuer Informatik.
- [24] Dario Della Monica, Angelo Montanari, and Pietro Sala. Beyond  $\omega BS$ -regular languages:  $\omega T$ -regular expressions and counter-check automata. In Patricia Bouyer, Andrea Orlandini, and Pierluigi San Pietro, editors, *Proc. of the 8th International* Symposium on Games, Automata, Logics and Formal Verification (GandALF), volume 256 of EPTCS, pages 223–237, Roma, Italy, September 2017.
- [25] Dario Della Monica, Angelo Montanari, Aniello Murano, and Pietro Sala. Prompt interval temporal logic. In Proc. of the 15th European Conference On Logics In Artificial Intelligence (JELIA), volume 10021 of Lecture Notes in Computer Science, pages 207–222, 2016.
- [26] Luca Aceto, Dario Della Monica, Valentin Goranko, Anna Ingólfsdóttir, Angelo Montanari, and Guido Sciavicco. A complete classification of the expressiveness of interval logics of Allen's relations: The general and the dense cases. Acta Informatica, 53(3):207–246, 2016.
- [27] D. Romero-Hérnandez, D. de Frutos-Escrig, and D. Della Monica. Proving continuity of coinductive global bisimulation distances: A never ending story. In *Proc. of the* 15th Jornadas sobre PROgramación y LEnguajes (PROLE), EPTCS, 2015.
- [28] L. Aceto, D. Della Monica, I. Fábregas, and A. Ingólfsdóttir. When are prime formulae characteristic? In Giuseppe F. Italiano, Giovanni Pighizzini, and Donald Sannella,

editors, Proc. of the 40th International Symposium on Mathematical Foundations of Computer Science (MFCS)—Part I, volume 9234 of LNCS, pages 76–88. Springer-Verlag Berlin Heidelberg, 2015.

- [29] D. Bresolin, D. Della Monica, A. Montanari, P. Sala, and G. Sciavicco. On the complexity of fragments of the modal logic of Allen's relations over dense structures. In Proc. of the 9th International Conference on Language and Automata Theory and Applications (LATA), volume 8977 of Lecture Notes in Computer Science, pages 511– 523. Springer, 2015.
- [30] Luca Aceto, Dario Della Monica, Anna Ingólfsdóttir, Angelo Montanari, and Guido Sciavicco. On the expressiveness of the interval logic of Allen's relations over finite and discrete linear orders. In E. Fermé and J. Leite, editors, *Proc. of the 14th European Conference on Logics in Artificial Intelligence (JELIA)*, volume 8761 of *LNAI*, pages 267–281, 2014.
- [31] Dario Della Monica, Angelo Montanari, Guido Sciavicco, and Dmitri Tishkovsky. First steps towards automated synthesis of tableau systems for interval temporal logics. In Proc. of the 5th International Conference on Computational Logics, Algebras, Programming, Tools, and Benchmarking (COMPUTATION TOOLS), pages 32–37, Venice, Italy, May 25–29 2014. Winner of the best paper award.
- [32] Davide Bresolin, Dario Della Monica, Angelo Montanari, Pietro Sala, and Guido Sciavicco. Interval temporal logics over strongly discrete linear orders: Expressiveness and complexity. *Theoretical Computer Science (TCS)*, 560:269–291, 2014.
- [33] Davide Bresolin, Dario Della Monica, Valentin Goranko, Angelo Montanari, and Guido Sciavicco. The dark side of Interval Temporal Logic: marking the undecidability border. Annals of Mathematics and Artificial Intelligence (AMAI), 71(1-3):41–83, 2014. Online since September 2013.
- [34] Davide Bresolin, Dario Della Monica, Angelo Montanari, and Guido Sciavicco. The light side of interval temporal logic: the Bernays-Schönfinkel fragment of CDT. Annals of Mathematics and Artificial Intelligence (AMAI), 71(1-3):11–39, 2014. Online since March 2013.
- [35] Luca Aceto, Dario Della Monica, Anna Ingólfsdóttir, Angelo Montanari, and Guido Sciavicco. An algorithm for enumerating maximal models of Horn theories with an application to modal logics. In Proc. of the 19th International Conference on Logic for Programming, Artificial Intelligence, and Reasoning (LPAR), volume 8312 of Lecture Notes in Computer Science, pages 1–17. Springer, 2013.
- [36] D. Della Monica, M. Napoli, and M. Parente. Model checking coalitional games in shortage resource scenarios. In Proc. of the 4th International Symposium on Games, Automata, Logics and Formal Verification (GandALF), 2013.
- [37] L. Aceto, D. Della Monica, A. Ingólfsdóttir, A. Montanari, and G. Sciavicco. A complete classification of the expressiveness of interval logics of Allen's relations over dense linear orders. In Proc. of the 20th International Symposium on Temporal Representation and Reasoning (TIME), pages 65–72, 2013.
- [38] D. Bresolin, D. Della Monica, A. Montanari, and G. Sciavicco. A tableau system for right propositional neighborhood logic over finite linear orders: an implementation.

In D. Galmiche and D. Larchey-Wendling, editors, *Proc. of the 22nd International Conference on Automated Reasoning with Analytic Tableaux and Related Methods (TABLEAUX)*, volume 8123 of *LNCS*, pages 74–80. Springer-Verlag Berlin Heidelberg, 2013.

- [39] D. Bresolin, D. Della Monica, V. Goranko, A. Montanari, and G. Sciavicco. Metric propositional neighborhood interval logics on natural numbers. *Software and Systems Modeling (SoSyM)*, 12(2):245–264, 2013.
- [40] Dario Della Monica, Valentin Goranko, Angelo Montanari, and Guido Sciavicco. Crossing the undecidability border with extensions of propositional neighborhood logic over natural numbers. Journal of Universal Computer Science (JUCS), 18(20):2798– 2831, 2012.
- [41] D. Bresolin, D. Della Monica, A. Montanari, P. Sala, and G. Sciavicco. Interval Temporal Logics over strongly discrete linear orders: the complete picture. In Proc. of the 3rd International Symposium on Games, Automata, Logics and Formal Verification (GandALF), Naples, Italy, September 2012.
- [42] D. Bresolin, D. Della Monica, A. Montanari, P. Sala, and G. Sciavicco. Interval Temporal Logics over finite linear orders: the complete picture. In *Proc. of the 20th European Conference on Artificial Intelligence (ECAI)*, pages 199–204, Montpellier, France, August 2012.
- [43] Dario Della Monica, Angelo Montanari, and Pietro Sala. The importance of the past in interval temporal logics: the case of Propositional Neighborhood Logic. In Alexander Artikis, Robert Craven, Nihan Kesim Cicekli, Babak Sadighi, and Kostas Stathis, editors, Logic Programs, Norms and Action Essays in Honor of Marek J. Sergot on the Occasion of His 60th Birthday, volume 7360 of Lecture Notes in Computer Science, pages 79–102. Springer Berlin / Heidelberg, 2012. http://dx.doi.org/10.1007/978-3-642-29414-3\_6.
- [44] D. Della Monica and G. Lenzi. On a priced resource-bounded alternating μ-calculus. In Proc. of the 4th International Conference on Agents and Artificial Intelligence (ICAART), pages 222–227, Vilamoura, Algarve, Portugal, February 2012.
- [45] D. Della Monica, V. Goranko, A. Montanari, and G. Sciavicco. Interval Temporal Logics: a Journey. *Bulletin of the EATCS*, 105, October 2011.
- [46] D. Della Monica, M. Napoli, and M. Parente. On a Logic for Coalitional Games with Priced-Resource Agents. *Electronic Notes in Theoretical Computer Science (ENTCS)*, 278:215–228, 2011. Proc. of the 7th Workshop on Methods for Modalities (M4M 2011) and the 4th Workshop on Logical Aspects of Multi-Agent Systems (LAMAS 2011).
- [47] D. Bresolin, D. Della Monica, A. Montanari, and G. Sciavicco. The light side of Interval Temporal Logic: the Bernays-Schönfinkel's fragment of CDT. In Proc. of the 18th International Symposium on Temporal Representation and Reasoning (TIME), September 2011.
- [48] D. Bresolin, D. Della Monica, V. Goranko, A. Montanari, and G. Sciavicco. The dark side of Interval Temporal Logic: sharpening the undecidability border. In Proc. of the 18th International Symposium on Temporal Representation and Reasoning (TIME), September 2011.

- [49] D. Della Monica, V. Goranko, A. Montanari, and G. Sciavicco. Expressiveness of the Interval Logics of Allen's Relations on the Class of all Linear Orders: Complete Classification. In Proc. of the 22nd International Joint Conference on Artificial Intelligence (IJCAI), pages 845–850, July 2011.
- [50] D. Bresolin, D. Della Monica, A. Montanari, P. Sala, and G. Sciavicco. A decidable spatial generalization of Metric Interval Temporal Logic. In N. Markey and J. Wijsen, editors, Proc. of the 17th International Symposium on Temporal Representation and Reasoning (TIME), pages 95–102, Paris, France, September 2010. IEEE Computer Society Press.
- [51] D. Bresolin, D. Della Monica, V. Goranko, A. Montanari, and G. Sciavicco. Metric Propositional Neighborhood Logics: Expressiveness, Decidability, and Undecidability. In Proc. of the 19th European Conference on Artificial Intelligence (ECAI), pages 695–700, Lisbon, Portugal, August 2010.
- [52] D. Della Monica and G. Sciavicco. On First-Order Propositional Neighborhood Logics: a First Attempt. In Proc. of the ECAI 2010 Workshop on Spatio-Temporal Dynamics (STeDY), pages 43–48, Lisbon, Portugal, August 2010.
- [53] D. Della Monica, V. Goranko, and G. Sciavicco. Hybrid Metric Propositional Neighborhood Logics with Interval Length Binders. *Electronic Notes in Theoretical Computer Science (ENTCS)*, 273:3–19, 2011. Proc. of the International Workshop on Hybrid Logic and Applications (HyLo 2010).
- [54] D. Bresolin, D. Della Monica, V. Goranko, A. Montanari, and G. Sciavicco. Undecidability of the logic of *Overlap* relation over discrete linear orderings. *Electronic Notes in Theoretical Computer Science (ENTCS)*, 262:65–81, 2010. Proc. of the 6th Workshop on Methods for Modalities (M4M-6 2009).
- [55] D. Bresolin, D. Della Monica, V. Goranko, A. Montanari, and G. Sciavicco. Undecidability of Interval Temporal Logics with the Overlap Modality. In C. Lutz and J.F. Raskin, editors, Proc. of the 16th International Symposium on Temporal Representation and Reasoning (TIME), pages 88–95. IEEE Computer Society Press, July 2009.
- [56] D. Bresolin, D. Della Monica, V. Goranko, A. Montanari, and G. Sciavicco. Decidable and Undecidable Fragments of Halpern and Shoham's Interval Temporal Logic: Towards a Complete Classification. In I. Cervesato, H. Veith, and A. Voronkov, editors, *Proc. of the 15th International Conference on Logic for Programming, Artificial Intelligence, and Reasoning (LPAR)*, volume 5330 of *Lecture Notes in Computer Science*, pages 590–604. Springer, November 2008.

October 18, 2024

Dario Della Monica