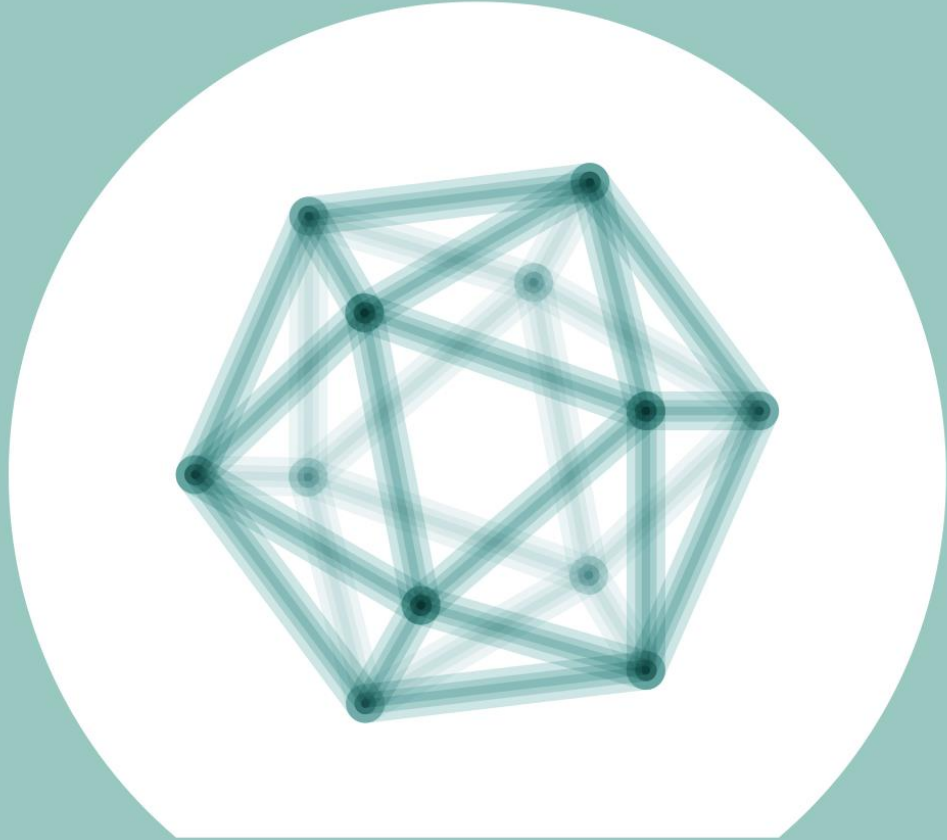


Conference Program



#AI4

AI*IA 2015 CONFERENCE

14th Conference of the Italian Association for Artificial Intelligence
Ferrara 23-25 September 2015

aixia2015.unife.it

Invited speakers: **Laurent Perron**, **Kristian Kersting**, **Oren Etzioni**, **Kevin Warwick**.
Program chairs: Marco Gavanelli, Evelina Lamma, Fabrizio Riguzzi.

Conference at a Glance

AIXIA Conference, AIXIA Conference 2			Wed 23 Sep – Fri 25 Sep 2015 (Rome)		
Wed 23/9			Thu 24/9		
09:00	Registration @ Main Room Entrance 08:30 - 14:30	Opening Doctoral Consortium + DC Presentations @ Main Room 08:50 - 10:40	Registration @ Main Room Entrance 08:30 - 09:00	Doctoral Consortium Posters @ Ballerine Room 09:00 - 18:45	Registration @ Main Room Entrance 08:30 - 09:00
10:00			Kristian Kersting @ Main Room 09:00 - 10:00	Paper Short Presentations 2A @ Main Room 10:30 - 11:00	Paper Short Presentations 3A @ Main Room 10:00 - 10:30
11:00	Coffee Break @ Acquario Room 11:10 - 12:25	Doctoral Consortium Presentations @ Main Room 11:10 - 12:25	Coffee Break @ Acquario Room 10:30 - 11:00	Paper Short Presentations 2B @ Main Room 11:30 - 13:00	Coffee Break @ Acquario Room 10:30 - 11:00
12:00	Lunch @ Acquario Room 12:25 - 14:20		Social Session 2A @ Council Room 11:30 - 13:00	Social Session 2B @ Acquario Room 11:30 - 13:00	Paper Short Presentations 3B @ Main Room 11:00 - 11:30
13:00			Lunch @ Acquario Room 13:00 - 14:30		Social Session Council Room 11:30 - 13:00
14:00	Opening Conference + Laurent Perron @ Main Room 14:20 - 15:30		Panel #A14Society @ Main Room 14:30 - 16:00		Lunch @ Acquario Room 13:00 - 14:30
15:00	Paper Short Presentations 1A @ Main Room 15:30 - 16:00		Coffee Break @ Acquario Room 16:00 - 16:30		AIXIA Awards @ Main Room 14:30 - 15:30
16:00	Coffee Break @ Acquario Room 16:00 - 16:30		AIXIA Awards: Somalivico Award @ Main Room 16:30 - 17:15		Kevin Warwick @ Main Room 15:30 - 16:30
17:00	Paper Short Presentations 1B @ Main Room 16:30 - 17:00		AIXIA Assembly @ Main Room 17:15 - 18:45		Closing @ Main Room 16:30 - 17:00
18:00	Social Session 1A @ Council Room 17:00 - 18:40	Social Session 1B @ Acquario Room 17:00 - 18:40			
19:00		Doctoral Consortium Presentations @ Main Room 17:00 - 18:15			
20:00					Conference Dinner @ Agriturismo Principessa Pio 20:00 - 23:00

Table of Contents

Conference at a Glance	2
1. Notation for Conference Rooms	4
2. Main Conference Program	5
2.1. Wednesday 23 rd , September 2015	5
2.2. Thursday 24 th , September 2015	7
2.3. Friday 25 th , September 2015	9
3. Maps	11
3.1. Map of Trotti Mosti Palace – Ground Floor	11
3.2. Map of Trotti Mosti Palace – First Floor	12
3.3. Map of Giordani Palace – Ground Floor	13
3.4. Map of Giordani Palace – First Floor	14

1. Notation for Conference Rooms

G The room is in Giordani Palace

T The room is in Trotti Mosti Palace

GF The room is on the ground floor

1F The room is on the first floor

Examples:

- Main Room (T-1F) means that the room is in Trotti Mosti Palace on the first floor
- Acquario Room (G-GF) means that the room is in Giordani Palace on the ground floor

2. Main Conference Program

2.1. Wednesday 23rd, September 2015

08.30 – 14.30 Registration.....Main Room Entrance (T-1F)

08.50 – 09.00 Opening AI*IA Doctoral Consortium.....Main Room (Plenary) (T-1F)

Chair: Elena Bellodi, Alessio Bonfietti

09.00 – 10.40 Doctoral Consortium Presentations.....Main Room (Plenary) (T-1F)

Chairs: Elena Bellodi, Alessio Bonfietti

- *Logic Programming Techniques for Reasoning with Probabilistic Ontologies*
Riccardo Zese, Elena Bellodi, Evelina Lamma and Fabrizio Riguzzi
- *Structure Learning with Distributed Parameter Learning for Probabilistic Ontologies*
Giuseppe Cota, Riccardo Zese, Elena Bellodi, Evelina Lamma and Fabrizio Riguzzi
- *STOLE: A Reference Ontology for Historical Research Documents*
Laura Pandolfo
- *Ontology Based Semantic Image Interpretation*
Ivan Donadello

10.40 – 11.10 Coffee Break.....Acquario Room (G-GF)

11.10 – 12.25 Doctoral Consortium Presentations.....Main Room (Plenary) (T-1F)

Chairs: Elena Bellodi, Alessio Bonfietti

- *Labelled Variables in Logic Programming: A First Prototype in tuProlog*
Roberta Calegari, Enrico Denti and Andrea Omicini
- *Learning Static Constraints for Domain Modeling from Training Plans*
Rabia Jilani
- *A CP Scheduler for High-Performance Computers*
Thomas Bridi, Michele Lombardi, Andrea Bartolini, Luca Benini, and Michela Milano

12.25 – 14.20 LunchAcquario Room (G-GF)

14.20 – 14.30 Opening AI*IA XIV Conference.....Main Room (Plenary) (T-1F)

Chair: Fabrizio Riguzzi

14.30 – 15.30 Invited Talk by

Laurent Perron (Google).....Main Room (Plenary) (T-1F)

Chair: Marco Gavanelli

15.30 – 16.00 Paper Short Presentations

6 Papers – Session 1AMain Room (Plenary) (T-1F)

Chair: Marco Maratea

- *Collective Self-Awareness and Self-Expression for Efficient Network Exploration*
Michele Amoretti and Stefano Cagnoni

- *Dynamical Properties of Artificially Evolved Boolean Network Robots*
Andrea Roli, Marco Villani, Roberto Serra, Stefano Benedettini, Carlo Pinciroli and Mauro Birattari
- *Empowering Agent Coordination with Social Engagement*
Matteo Baldoni, Cristina Baroglio, Federico Capuzzimati and Roberto Micalizio
- *Cooperating with Trusted Parties Should Makes Life Easier*
Stefania Costantini, Pasquale Caianiello, Giovanni De Gasperis and Subhasis Thakur
- *Learning Accurate Cutset Networks by Exploiting Decomposability*
Nicola Di Mauro, Antonio Vergari and Floriana Esposito
- *An Approach to Predicate Invention Based on Statistical Relational Model*
Stefano Ferilli and Giuseppe Fatiguso

16.00 – 16.30 Coffee Break.....Acquario Room (G-GF)

16.30 – 17.00 Paper Short Presentations

6 Papers – Session 1BMain Room (Plenary) (T-1F)

Chair: Toni Mancini

- *GENOMA: a GENeric Ontology Matching Architecture*
Maria Teresa Pazienza, Roberto Enea and Andrea Turbati
- *Advances in Multi-Engine ASP Solving*
Marco Maratea, Luca Pulina and Francesco Ricca
- *Bootstrapping Large Scale Polarity Lexicons through Advanced Distributional Methods*
Giuseppe Castellucci, Danilo Croce and Roberto Basili
- *A Logic-Based Approach to Named-Entity Disambiguation in the Web of Data*
Silvia Giannini, Simona Colucci, Francesco M. Donini and Eugenio Di Sciascio
- *Enriching a Timeline-Based Planner with Resource and Hierarchical Reasoning*
Alessandro Umbrico, Marta Cialdea Mayer and Andrea Orlandini
- *Approaching Qualitative Spatial Reasoning About Distances and Directions in Robotics*
Guglielmo Gemignani, Roberto Capobianco and Daniele Nardi

17.00 – 18.40 Social Session 1A (6 Papers) Council Room (G-1F)

17.00 – 18.40 Social Session 1B (6 Papers)Acquario Room (G-GF)

17.00 – 18.15 Doctoral Consortium Presentations.....Main Room (T-1F)

Chairs: Elena Bellodi, Alessio Bonfietti

- *Profiling the Linked Open Data*
Blerina Spahiu
- *Recommender Systems supporting Decision Making through Analysis of User Emotions and Personality*
Marco Polignano and Marco de Gemmis
- *Interaction with a personalised smart space for enhancing everyday life*
Assunta Matassa

2.2. Thursday 24th, September 2015

08.30 – 9.00 RegistrationMain Room Entrance (T-1F)

**09.00 – 10.00 Invited Talk by
Kristian Kersting (Technical University of Dortmund)Main Room (Plenary) (T-1F)**

Chair: Fabrizio Riguzzi

09.00 – 10.00 Doctoral Consortium PostersBallerine Room (T-1F)

10.00 – 10.30 Paper Short Presentations

6 Papers – Session 2AMain Room (Plenary) (T-1F)

Chair: Nicola Di Mauro

- *Swarm-Based Controller for Traffic Lights Management*
Federico Caselli, Alessio Bonfietti and Michela Milano
- *Adaptive Hybrid Agents for Tactical Decisions in Pedestrian Simulation*
Luca Crociani, Andrea Piazzoni, Giuseppe Vizzari and Stefania Bandini
- *Anticipatory Coordination in Socio-Technical Knowledge-Intensive Environments:
Behavioural Implicit Communication in MoK*
Stefano Mariani and Andrea Omicini
- *A Kinetic Study of Opinion Dynamics in Multi-Agent Systems*
Stefania Monica and Federico Bergenti
- *Verification-Enhanced Learning for Safe Human-Robot Interaction*
Shashank Pathak, Luca Pulina and Armando Tacchella
- *An AI Application to Integrated Tourism Planning*
Francesca Alessandra Lisi and Floriana Esposito

10.00 – 10.30 Doctoral Consortium PostersBallerine Room (T-1F)

10.30 – 11.00 Coffee BreakAcquario Room (G-GF)

11.00 – 11.30 Paper Short Presentations

6 Papers – Session 2BMain Room (Plenary) (T-1F)

Chair: Matteo Baldoni

- *Open Data Integration Using SPARQL and SPIN: A Case Study for the Tourism Domain*
Antonino Lo Bue and Alberto Machi
- *Defeasible Logic Programming in Satisfiability Modulo CHR*
Francesco Santini
- *Using Semantic Models for Robust Natural Language Human Robot Interaction*
Emanuele Bastianelli, Danilo Croce, Roberto Basili and Daniele Nardi
- *Using Semantic Models for Robust Natural Language Human Robot Interaction*
Emanuele Bastianelli, Danilo Croce, Roberto Basili and Daniele Nardi
- *ASCoL: a Tool for Improving Automatic Planning Domain Model Acquisition*
Rabia Jilani, Andrew Crampton, Diane Kitchin and Mauro Vallati

- *COACHES Cooperative Autonomous Robots in Complex and Human Populated Environments*
Luca Iocchi, Esra Erdem, Laurent Jeanpierre, Abdel-illah Mouaddib and Hichem Sahli

11.00 – 11.30 Doctoral Consortium PostersBallerine Room (T-1F)
11.30 – 13.00 Social Session 2A (6 Papers) Council Room (G-1F)
11.30 – 13.00 Social Session 2B (6 Papers)Acquario Room (G-GF)
11.30 – 13.00 Doctoral Consortium PostersBallerine Room (T-1F)
13.00 – 14.30 LunchAcquario Room (G-GF)
14.30 – 16.00 Panel #AI4SocietyMain Room (Plenary) (T-1F)

Chair: Piero Poccianti

- *Introduction*
Piero Poccianti
- *Ethical Intelligent Systems*
Francesca Rossi
- *Economical Impact of AI*
Moshe Vardi
- *AI Won't Exterminate Us, It Will Empower Us*
Oren Etzioni
- *Open Discussion*
- *Closing*
Amedeo Cesta

14.30 – 16.00 Doctoral Consortium PostersBallerine Room (T-1F)
16.00 – 16.30 Coffee Break.....Acquario Room (G-GF)
16.30 – 17.15 AI*IA Awards: AI*IA Somalvico Award 2015.....Main Room (Plenary) (T-1F)

Chairs: Amedeo Cesta, Francesca Lisi

16.30 – 17.15 Doctoral Consortium PostersBallerine Room (T-1F)
17.15 – 18.45 AI*IA Assembly
AI*IA Steering Committee ElectionMain Room (Plenary) (T-1F)
17.15 – 18.45 Doctoral Consortium PostersBallerine Room (T-1F)
20.00 – 23.00 Conference DinnerAgriturismo Principessa Pio

2.3. Friday 25th, September 2015

08.30 – 09.00 RegistrationMain Room Entrance (T-1F)

09.00 – 10.00 Invited Talk by

Oren Etzioni (Allen Institute for AI).....Main Room (Plenary) (T-1F)

Chair: Bernardo Magnini

10.00 – 10.30 Paper Short Presentations

6 Papers – Session 3AMain Room (Plenary) (T-1F)

Chair: Salvatore Ruggieri

- *Path Relinking for a Constrained Simulation-Optimization Team Scheduling Problem Arising in Hydroinformatics*
Maddalena Nonato and Andrea Peano
- *Using Stochastic Optimization to Improve the Detection of Small Checkerboards*
Hamid Hassannejad, Guido Matrella, Monica Mordonini and Stefano Cagnoni
- *Agent Based Simulation of Incentive Schemes on Photovoltaic Adoption*
Andrea Borghesi, Valerio Iachini and Michela Milano
- *Feature-Based Modeling in Industry*
Emilio Sanfilippo and Stefano Borgo
- *Common-Sense Knowledge for Natural Language Understanding: Experiments in Unsupervised and Supervised Settings*
Luigi Di Caro, Alice Ruggeri, Loredana Cupi and Guido Boella
- *Empowered Negative Specialization in Inductive Logic Programming*
Stefano Ferilli, Andrea Pazienza and Floriana Esposito

10.30 – 11.00 Coffee BreakAcquario Room (G-GF)

11.00 – 11.30 Paper Short Presentations

5 Papers – Session 3BMain Room (Plenary) (T-1F)

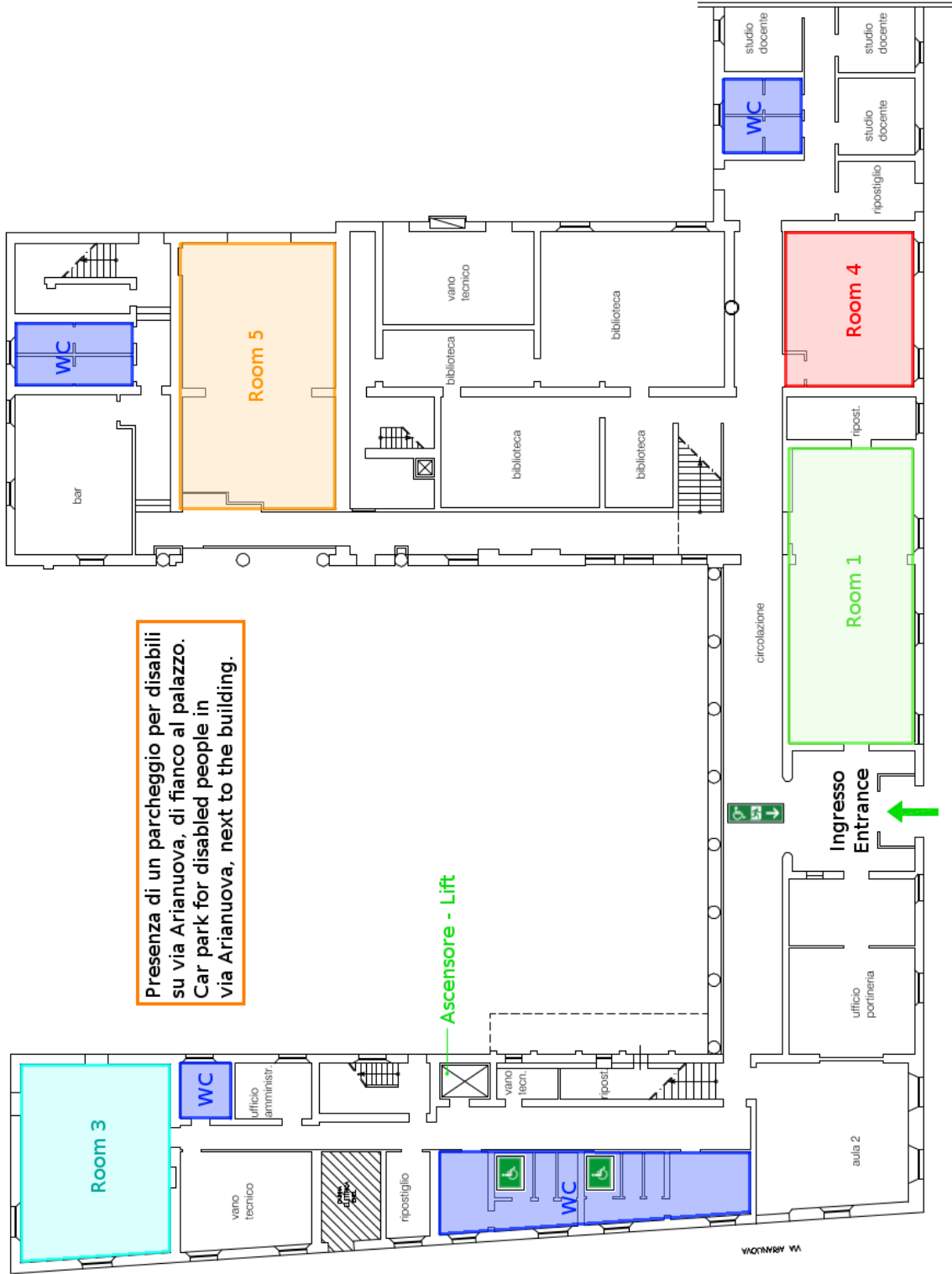
Chair: Michela Milano

- *A Multi-Engine Theorem Prover for a Description Logic of Typicality*
Laura Giordano, Valentina Gliozzi, Nicola Olivetti, Gian Luca Pozzato and Luca Violanti
- *Abstract Solvers for Quantified Boolean Formulas and Their Applications*
Remi Brochenin and Marco Maratea
- *Automatic Identification and Disambiguation of Concepts and Named Entities in the Multilingual Wikipedia*
Federico Scozzafava, Alessandro Raganato, Andrea Moro and Roberto Navigli
- *Graph-Based Task Libraries for Robots: Generalization and Autocompletion*
Steven Klee, Guglielmo Gemignani, Daniele Nardi and Manuela Veloso
- *Integrating Logic and Constraint Reasoning in a Timeline-based Planner*
Riccardo De Benedictis and Amedeo Cesta

11.30 – 13.00 Social Session 3A (6 Papers)Council Room (G-1F)
11.30 – 13.00 Social Session 3B (5 Papers)Acquario Room (G-GF)
13.00 – 14.30 LunchAcquario Room (G-GF)
14.30 – 15.00 AI*IA Awards:
In Memory of Marco Cadoli Award for Best PhD ThesisMain Room (Plenary) (T-1F)
Chairs: Amedeo Cesta, Francesca Lisi
15.00 – 15.15 AI*IA Awards:
In Memory of Leo Lesmo Award for Best Thesis.....Main Room (Plenary) (T-1F)
Chairs: Amedeo Cesta, Francesca Lisi
15.15 – 15.30 AI*IA2015 Awards:
In Memory of Giovanni Soda Award for AI*IA 2015 Best Paper, Best Application Paper, Best DC PaperMain Room (Plenary) (T-1F)
Chairs: Evelina Lamma, Alessio Bonfietti
15.30 – 16.30 Invited Talk by Kevin Warwick (Coventry University, England) Jointly with UniFestivalMain Room (Plenary) (T-1F)
Chair: Fabrizio Riguzzi
16.30 – 17.00 Closing.....Main Room (Plenary) (T-1F)

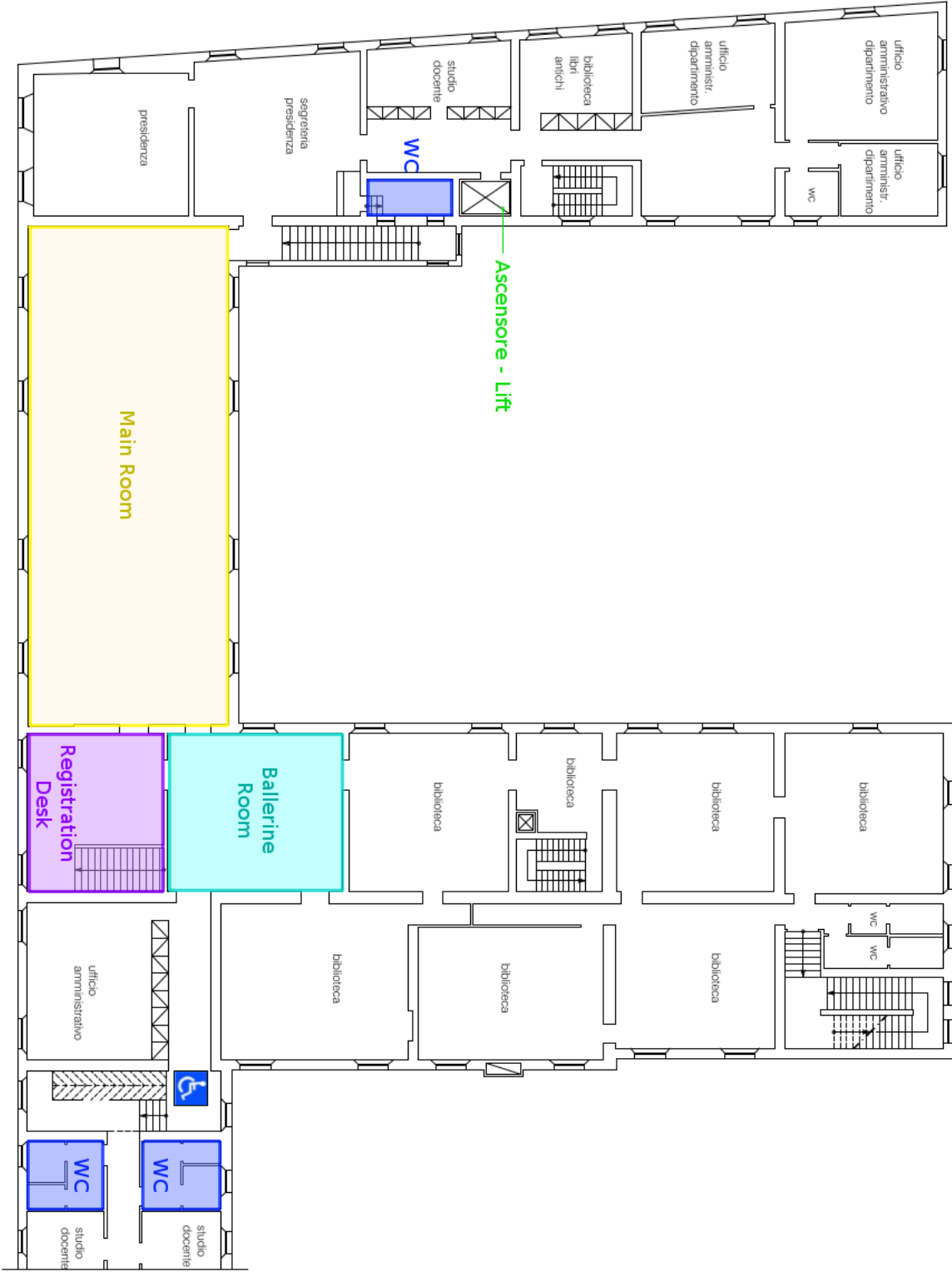
3. Maps

3.1. Map of Trotti Mosti Palace – Ground Floor



Palazzo Trotti Mosti (Trotti Mosti Palace)
Piano Terra - Ground Floor
Corso Ercole I D'Este, 37

3.2. Map of Trotti Mosti Palace – First Floor



Palazzo Trotti Mosti (Trotti Mosti Palace)
 Primo Piano - First Floor
 Corso Ercole I D'Este, 37

3.3. Map of Giordani Palace – Ground Floor

Parte non accessibile dell'edificio
Not accessible part of the building

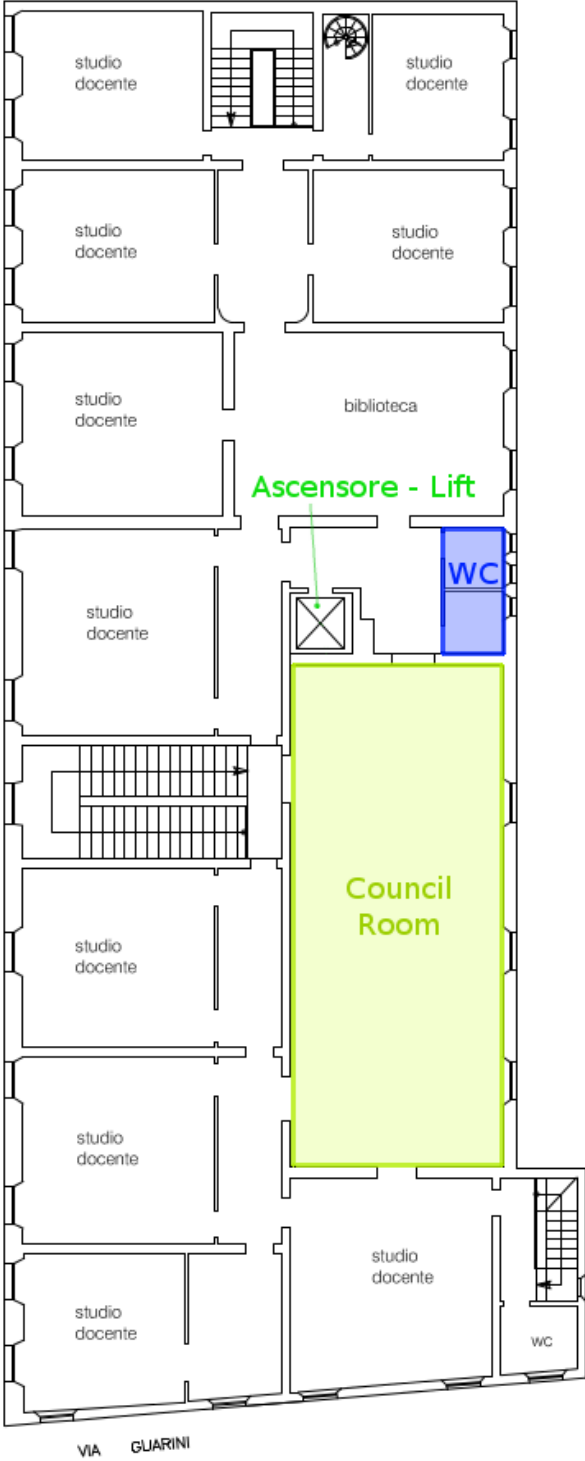
Ascensore - Lift
Chiedere le chiavi
in portineria.
Ask for the key at the
janitor's lodge.

Presenza di un parcheggio per disabili
su via Guarini, di fianco al palazzo.
Car park for disabled people in
via Guarini, next to the building.



Palazzo Giordani (Giordani Palace)
Piano Terra - Ground Floor
Corso Ercole I D'Este, 44

3.4. Map of Giordani Palace – First Floor



**Palazzo Giordani (Giordani Palace)
Primo Piano - First Floor
Corso Ercole I D'Este, 44**