



Italian National Ph.D. in Artificial Intelligence

WELCOME MEETING (40° Cycle)

**Sala Gerace, Department of Computer Science,
University of Pisa, Largo Bruno Pontecorvo 3, Pisa, Italy**

November 13th 2024 h. 09.30

Agenda

09:30-09:45: Institutional Greetings:

- **Prof. Bernardo Tellini**, Prorector for Ph.D. Programs, University of Pisa
- **Prof. Paolo Maria Mancarella**, Director of the Dept. of Computer Science, University of Pisa
- **Dr. Marco Conti** Delegate of the President of National Research Council (CNR)

09:45-10:15: The Italian National PhD in AI & its Scientific Vision

10:15-11:00: Tour de Table of the PhD Students & Board Members

11:00-11:45: PhD Programme Organization

11:45-12:45: Cracking the language of life with AI

- **Prof. Francesco Raimondi**, Scuola Normale Superiore

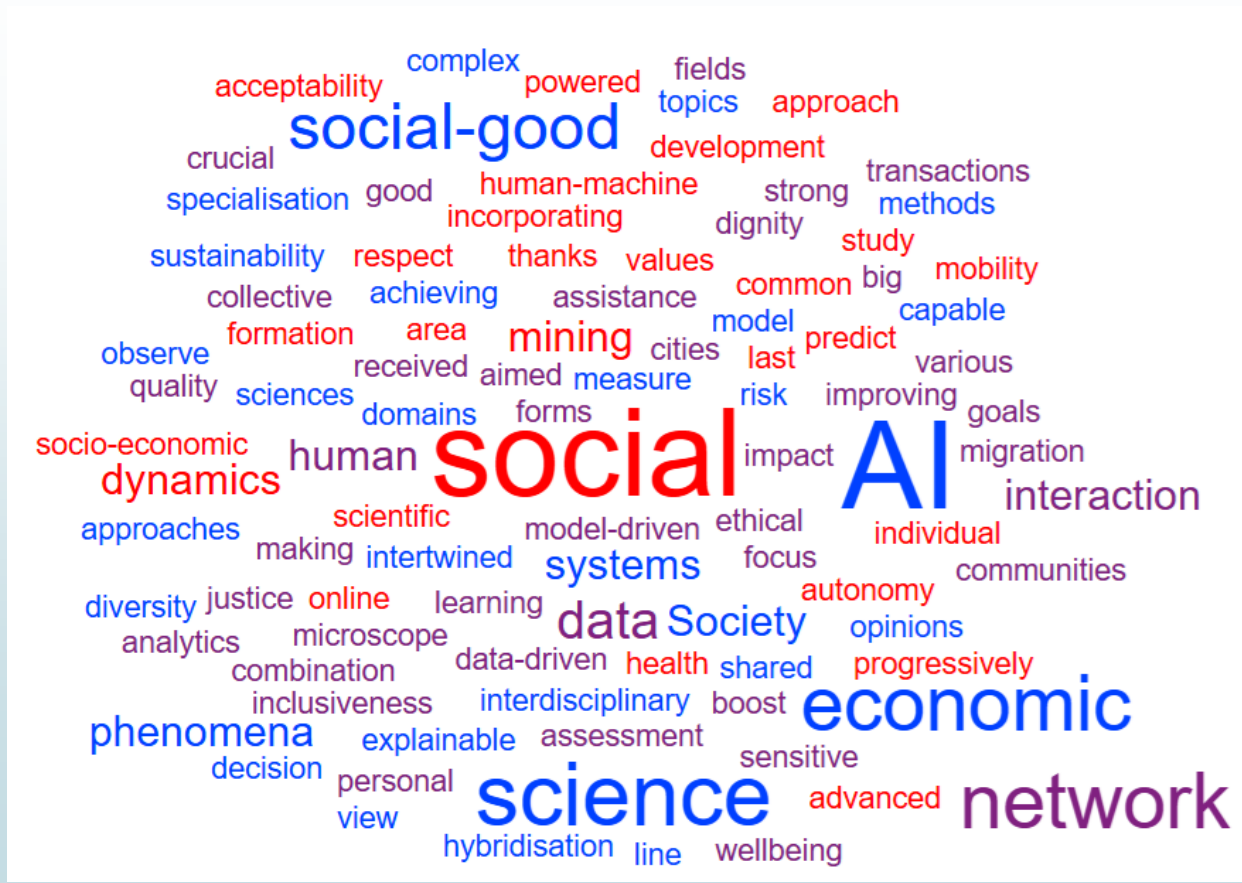
12:45-14:30: Networking Lunch

Italian National Ph.D. in AI

The Italian National Ph.D. in Artificial Intelligence (AI) deals with topics central to the **digital transformation of society**. It aims to **boost research, industrial and social innovation** in the country. The Italian National Ph.D. in Artificial Intelligence for Society (University of Pisa) is part of a **federation of 5 Ph.D. programs** in the field of AI. Each of them is organized by a lead University and a broad consortium of Universities and research centers. The 5 Ph.D. programs have both a common basis focused on the foundational aspects of AI and 5 areas of specialization:



Ph.D. AI for Society – University of Pisa



<https://fondazione-fair.it/>
Spoke 1 research questions

Human-centered machine learning and reasoning: how humans and AI models interact synergistically, continuously co-evolving together (WP 1.1, 1.2, 1.3)

Social-aware AI: how to understand and govern the dynamics and societal outcomes of large-scale socio-technical systems of humans and AIs (WP1.4, 1.5)

Responsible design of trustworthy AI systems: how to responsibly (co-)design, develop, validate and use trustworthy AI systems (WP1.6)

Extensive experiments, case studies and pilots of H-AI systems (WP1.7)

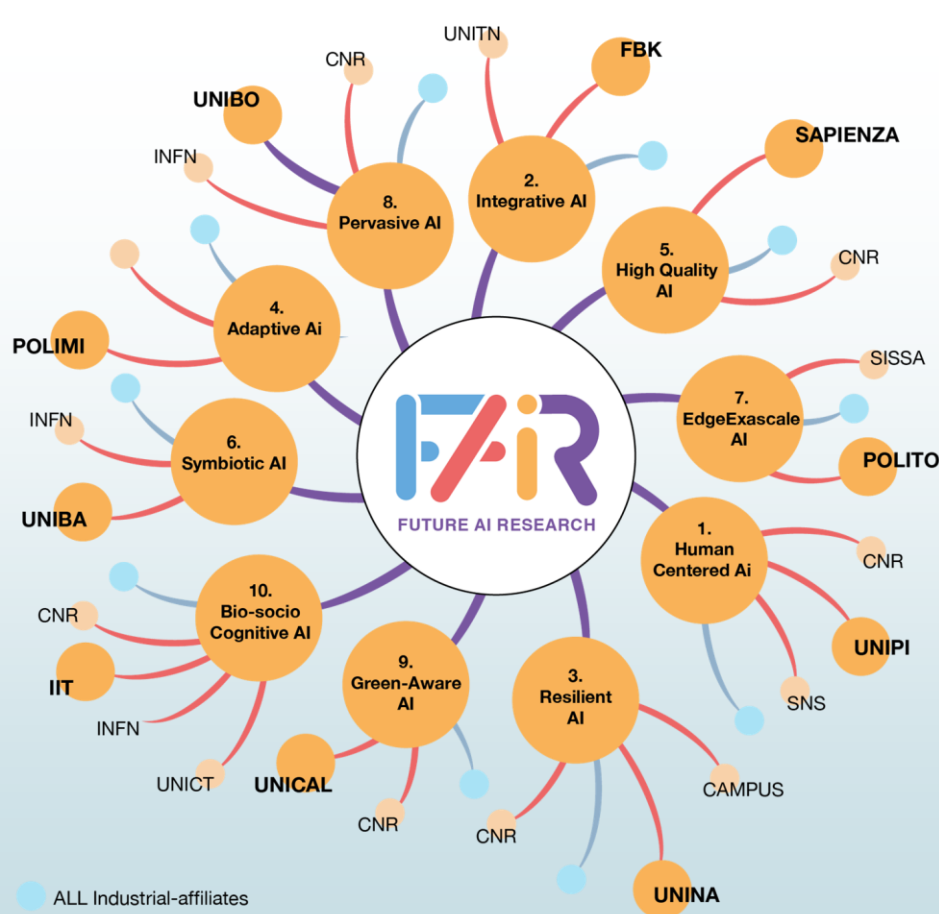
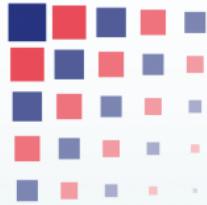


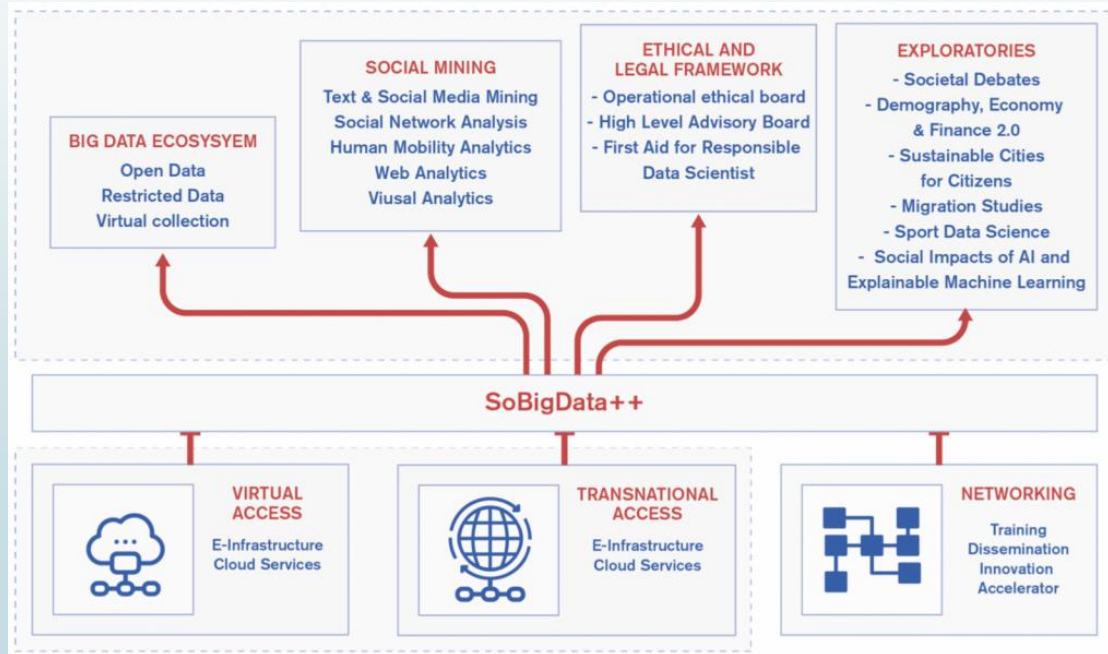
Fig. A.2 Spokes and Affiliates

<https://plusplus.sobigdata.eu/>



SOBIGDATA⁺⁺

PLUS PLUS



40 cycle – Associated Universities, Institutions and Companies



Available Grants: **50**

Applications: **176**

Ranked Candidates: **118**

Awarded Grants: **42 + 4 Supernumerary**

40 cycle – Awarded Grants



- **2 grants funded by FAIR** “FAIR Future AI Research”: Università di Bari “Aldo Moro” (2)
- **9 grants funded by PNRR**: Università di Pisa (4), Università Cattolica Sacro Cuore di Milano (1), Università di Messina (1), Università di Siena (1), Gran Sasso Science Institute (1) and Università di Trento (1)
- **11 grants funded by CNR/ISTI** (5), CNR/IIT (3), INFN (2), CNR/ILC (1)
- **20 grants funded by Scuola Normale Superiore** (3), Università di Modena and Reggio Emilia (4), Scuola Superiore Sant’Anna (2), Università di Trento (2), Università L’Orientale di Napoli (2), Università di Pisa (4), IMT Lucca (1), Università Cattolica Sacro Cuore di Milano (1), Università di Sassari (1)

Each grant has a topic

Your research is towards the topic of the grant you received!

Tour de table

**PhD Students and Board Members
and UniPi Secretariat**



Simone Farinella

secretariat-ai-society@phd-ai.it

PhD course organization

Grant assignment and host institution (“sede operativa”)

- Formal assignment to grant/host institution that finances or co-finances the Ph.D. grant (“sede operativa”) already approved by the PhD Board
- From an administrative/regulation point of view, each Ph.D student is enrolled at UniPi, but the PhD degree is jointly awarded by both UniPi and the host institution
 - Official communications are sent only to @studenti.unipi.it
 - Computing services offered include email, GSuite, Office365, etc.
- From a scientific point of view, each Ph.D. student develops their research activity at the host institution
 - The reference workplace of each Ph.D. student is provided by the host institution
 - Host institutions also provide access to resources (sw, hw, funds)
- UNIPI/Computer Science Department (Largo Bruno Pontecorvo 3, Pisa) provides open space desks for temporary visiting PhD students from other host institutions

Supervisor and co-supervisor

- Supervisors are the main reference for PhD Students in all of their activities
 - Course selection, researching, writing, presenting, periods abroad, ... everything!
 - Meet and report continuously to the supervisors (at least once a week)
- The supervisor is chosen among the professors of the institutions of your grant, typically the principal investigator of the grant
- The co-supervisor should complement the supervisor in terms of multidisciplinary supervision (whenever possible)
- Supervisor and co-supervisor must be communicated to the coordinator **by May 2025**
- Up to this communication the “default” supervisor is the principal investigator of the grant (for supernumerary students, it is assigned by the coordinator)

Training Activities

At least **140 hours** of courses to be attended (overall in 3 years, the earlier the better):

- Courses with exams: **at least 80 hours**
- Training activities without exams: **at least 60 hours**, which include
 - one PhD Summer School organized by the PhD program in AI (**mandatory**)
 - or other doctoral schools
 - or (max 20h) activities on soft skills, research management, research systems, entrepreneurship, intellectual property, etc., (e.g., PhD+ @ UNIPI)

selected among the courses of the PhD program in AI for Society

<https://phd-ai-society.di.unipi.it/training/>

or among course of PhD programs from the host institution, or other national program of PhD in AI (La Sapienza, Campus Bio-medico, Politecnico Torino and Federico II), or of any other PhD-level course worldwide (subject to approval).

Training Activities

More than 40 courses already published at

<https://phd-ai-society.di.unipi.it/training/>

Two of them start soon (see page above for link):

- PDAI: Programming & Data Analytics & AI. Prof. Andrea Vandin, 40h
 - Started 11 Nov
- Cloud Computing & Big Data. Prof. Tommaso Cucinotta, 30h
 - Starts on 25 Nov

Study plan and exams

Each PhD student drafts a study plan in collaboration with their supervisor(s) **by December 15th 2024** (forms for study plan will be sent by email)

- The coordinator will approve/reject the study plan
- Supervisors/coordinator can indicate for a specific student additional courses for alignment purposes (up to a maximum of 60 hours)

To certify the attendance at the courses without exam and the passed exams, PhD students must send to secretariat-ai-society@phd-ai.it a signed declaration by the professor of the course (form for the declaration will be sent by email)

AI for Society Summer School 2024/25

Where: Pisa

When: 5-10 June 2025

The fourth edition of the “AI for Society Summer School” is dedicated to the PhD students of the “AI & Society” branch of PhD-AI.it, and open to PhD students of the other branches. A few thrilling days of lectures, panel, poster sessions and proactive project work, to advance the frontier of AI research together with internationally renown scientists. And plenty of social activities to mix up and build the community of next-generation AI researchers, innovators and professionals. The summer school is co-located with:

HHAI 2025: The 4th International Conference Series on Hybrid Human-Artificial Intelligence

June 9-13, 2025 (Pisa, Italy)

Individual panel for each PhD student

The Panel has an advising role during the yearly assessment of the PhD student advancement.

- **July 2025:** Ph.D. students will communicate to the coordinator the panel composition agreed with their supervisors
 - 2 supervisors + at least 2 additional members
 - at least 2 members should be part of the PhD Board
 - foster diversity in terms of disciplines and collaboration among research groups

Yearly assessment of the PhD activities and thesis defence

- **September-October 2025:**
 - Submission of the thesis proposal and report on first year activity to the panel
 - Meeting with the panel with a presentation of the thesis proposal
 - The panel will send the assessment to the PhD Board
 - The PhD Board will decide on the admittance to the second year
- **September-October 2026:**
 - Meeting with the panel with a presentation of the progress of research
 - The panel will send the assessment to the PhD Board
 - The PhD Board will decide on the admittance to the third year
- **September-October 2027:**
 - The supervisors will send an assessment to the PhD Board of suitability for defence
 - The PhD Board will decide on the admittance to the defence procedure
- **November-December 2027:** thesis is reviewed by 2 external referees
- **January-March 2028:** defence and degree!

PNRR grants and periods abroad

Duties related to grants **d.m. 629/2024** and **d.m. 630/2024**:

- **629 Research:** 1) research periods of 6 months abroad.
- **629 Public Administration:** 1) research periods of 6 months abroad and 2) study and research periods of 6 months in companies or research centers or public administrations.
- **629 Digital and Environmental Transitions:** 1) study and research periods of 6 months abroad and 2) study and research periods of 6 months in companies or research centers.
- **630:** 1) study and research periods of 6 months abroad and 2) study and research periods of 6 months in a company

All PhD students are highly recommended to have periods abroad!

max 18 months, +50% scholarship

Available funding for PhD students

- Grant (over 3 years): 48.729,00 €
- Budget 20% for research activity (overall 3 years): 9.745,80 €
 - Assigned annually ($\frac{1}{3}$ per year)
- Functioning funds (overall 3 years): 1.264,01 €
 - Assigned una-tantum at the first year
- Periods abroad (up to 18 months): +50% of the grant for the period
- Other funds
 - Provided by supervisors' projects and host institutions

Purchases, expenses, and trips (missioni)

- Authorization required for every usage of any fund (both PhD students' and others' funds)
 - by the supervisor and by the coordinator
- For using PhD students' funds:
 - purchases up to 99 euro can be refund by cash by Massimiliano Galli
 - purchases above 99 euro must be made through ordini@di.unipi.it (Simona Barsotti)
 - registration to conferences must be made by cristina.mannaioni@unipi.it
 - trips (missioni) are refunded on your bank account, but advance payments are possible
- Trips (missioni) are managed by an online system (UGov Web):
 - at least 5 days before the trip, you enter a request with details and the signed authorization by the supervisor and the coordinator
 - keep all receipt in original! also keep the exchange of foreign currency of your bank
 - at your return, scan and upload all receipts
 - watch the tutorial at phd-ai-society.di.unipi.it/secretariat/
 - reference person: ramona.serafini@unipi.it

Main contacts

Coordinator PhD-AI for Society	coordinator-ai-society@phd-ai.it
Secretariat PhD-AI for Society	secretariat-ai-society@phd-ai.it
PhD Students PhD-AI for Society <u>40th cycle</u>	phdstudents-40-ai-society@phd-ai.it
All PhD Students PhD-AI for Society	phdstudents-ai-society@phd-ai.it
Website	phd-ai-society.di.unipi.it

Q&A

Welcome & best wishes to the new PhD students!

Invited talk

Cracking the language of life with AI

prof. Francesco Raimondi

Scuola Normale Superiore

Lunch time

but first let's take a photo!