Reasoning And Decision Group

UNIVERSITÀ DI TRENTO

CIMeC Center for Mind/Brain Sciences

What do we study at RAD?

People make dozens of **inferences** every day. These, indeed, are crucial for learning, hypothesis evaluation, evidence search and assessment, forecasting and, of course, **decision making**. Advancing the understanding of **high-level cognitive processes** is both theoretically fascinating and practically relevant, with implications for fields like **medical decision making**, **legal reasoning**, and **environmental sustainability**.
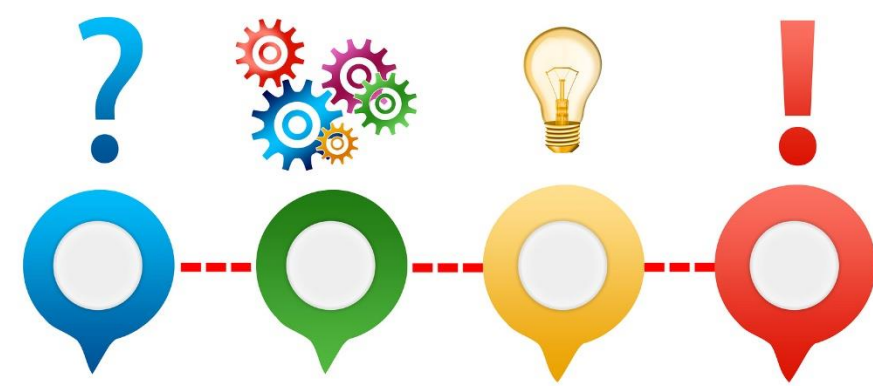
Our research agenda ranges from **experimental psychology** to **formal epistemology** and makes use of both original experimental procedures and theoretical modelling.

Our main research interests

- Inductive and probabilistic reasoning
- Decision making
- Reasoning fallacies & Decision biases
- Counterfactual thinking
- Conditional reasoning
- Forecasting
- Explainability in AI
- Nudging & Boosting
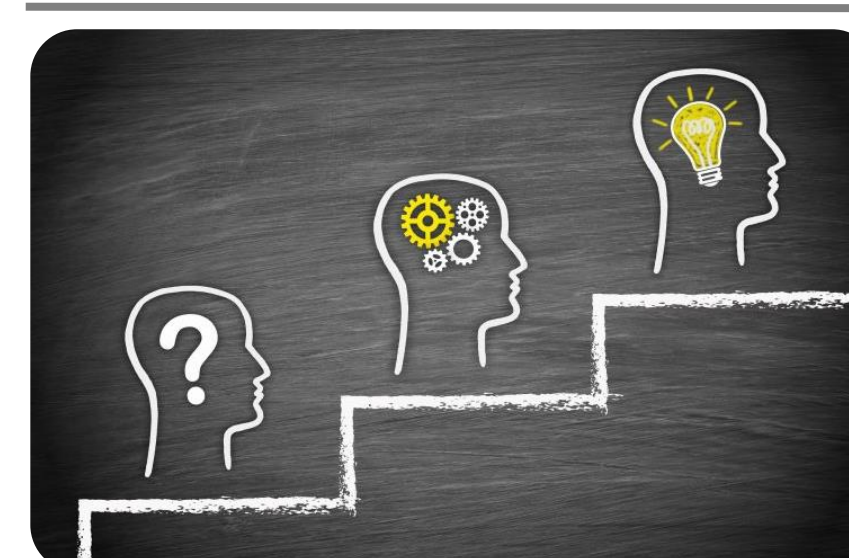- Applied reasoning and decision making

Ongoing projects

- Reasoning with conditional statements
- The quantification of forecasting accuracy
- Single and double conjunction fallacies
- Probabilistic reasoning in preschoolers
- Bayesian updating with negative evidence
- Decision making under stress
- Path dependency in sequential decisions
- Decision making in older adults
- Counterfactual potency
- Counterfactual thinking in social dilemmas
- Improving medical risk communication
- The effect of Plan-Bs in legal reasoning
- Intelligent tutoring for probabilistic reasoning

How do we do it?

- Behavioral experiments (in the lab and online)
- Formal modelling
- Simulations

Scan the QR code for

- Contact information
- A copy of this poster

Bayesian inferences

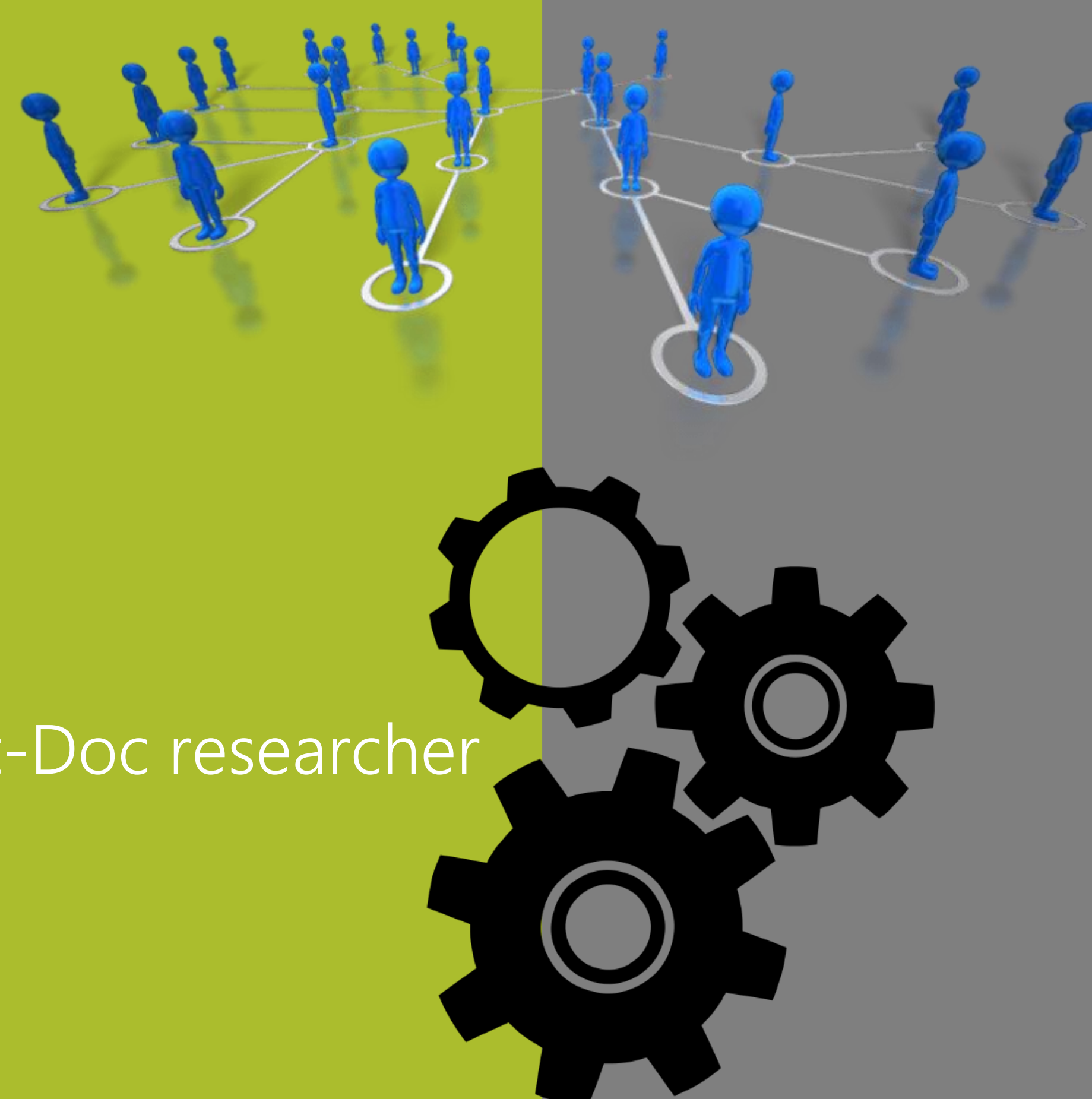*Children's reasoning*

Forecasting

Counterfactual thinking

Decision biases and nudging

Decisions under stress

Who are we?

- Katya Tentori, PhD, PI
- Stefania Pighin, PhD, PI
- Alessandro Bogani, PhD, Post-Doc researcher

Whom do we work with?

- Sarah Bigi, Catholic University of Milan
- Ruth Byrne, Trinity College (Ireland)
- Nick Chater, Warwick Business School (UK)
- Vincenzo Crupi, University of Torino
- Donatella Ferrante, University of Trieste
- Andrea Iacona, University of Torino
- David Lagnado, University College London (UK)
- Andrea Passerini, University of Trento
- Fabio Paglieri, CNR-Roma
- Barbara Pellegrini, University of Verona
- Ilana Ritov, Hebrew University (Israel)
- Lucia Savadori, University of Trento
- Stefano Teso, University of Trento