

# Reasoning And Decision group

## What do we study at RAD?

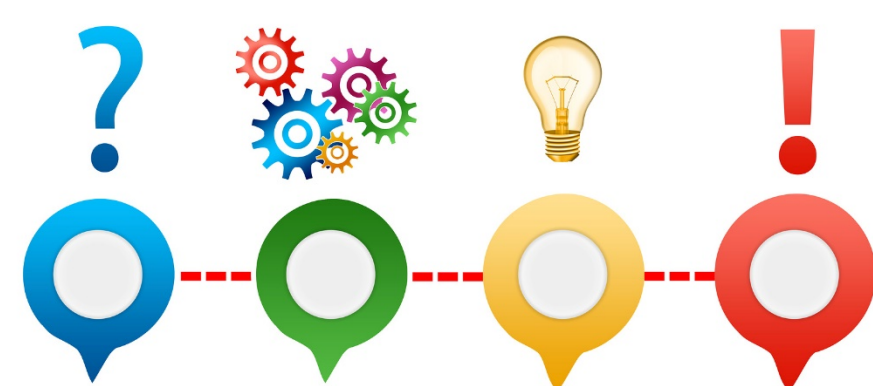
People make dozens of **inferences** every day. Inferences, indeed, are crucial for learning, hypothesis evaluation, evidence search and assessment, forecasting and, of course, decision making. The advance of theoretical and empirical knowledge about these **higher-level cognitive processes** is extremely interesting *per se*, but it also has broad implications for intervention in many applied settings, such as **legal reasoning, medical decision making and environmental sustainability**. Our research agenda ranges from **experimental psychology** to **formal epistemology** and makes use of both original experimental procedures and theoretical modelling.

## Ongoing projects

- Single and double conjunction fallacies
- Decision making under stress
- Path dependency in sequential decisions
- Decision making in older adults
- Counterfactual reasoning and blame attributions in older adults
- Counterfactual reasoning in social dilemmas
- Counterfactual reasoning in dynamic tasks
- The quantification of forecasting accuracy
- Bayesian updating with auditory and visual stimuli
- Probabilistic reasoning in preschoolers
- 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)
- Theoretical modelling
- Simulations



## Scan the QR code for

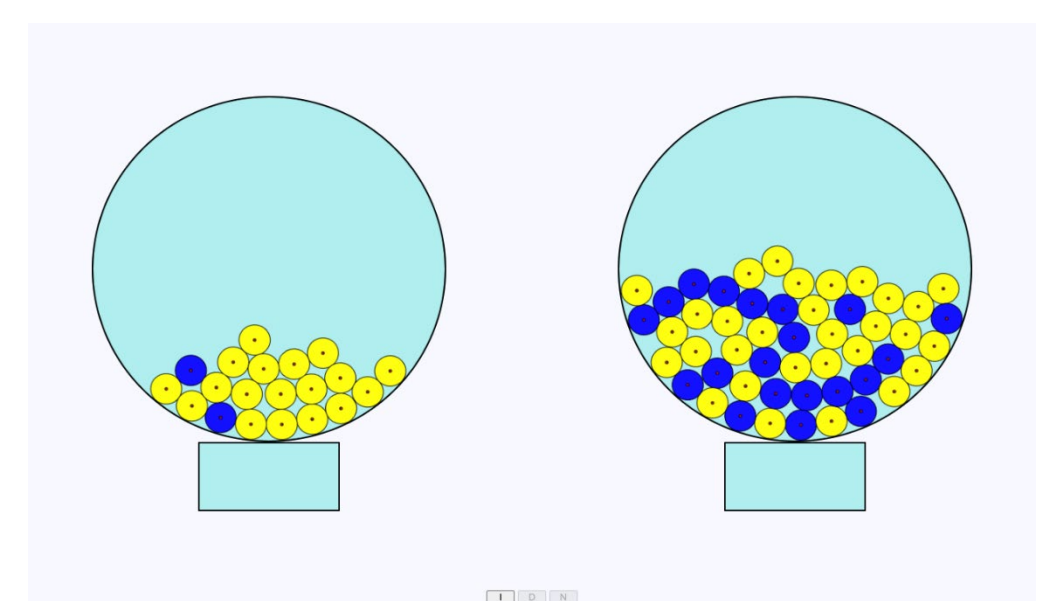
- Contact information
- A copy of this poster
- Animations of our tasks!

## Our main research interests

- Inductive and probabilistic reasoning
- Decision making
- Forecasting
- Counterfactual reasoning
- Information search
- Causal cognition
- Reasoning fallacies and decision biases
- Applied reasoning and decision making



## Bayesian updating



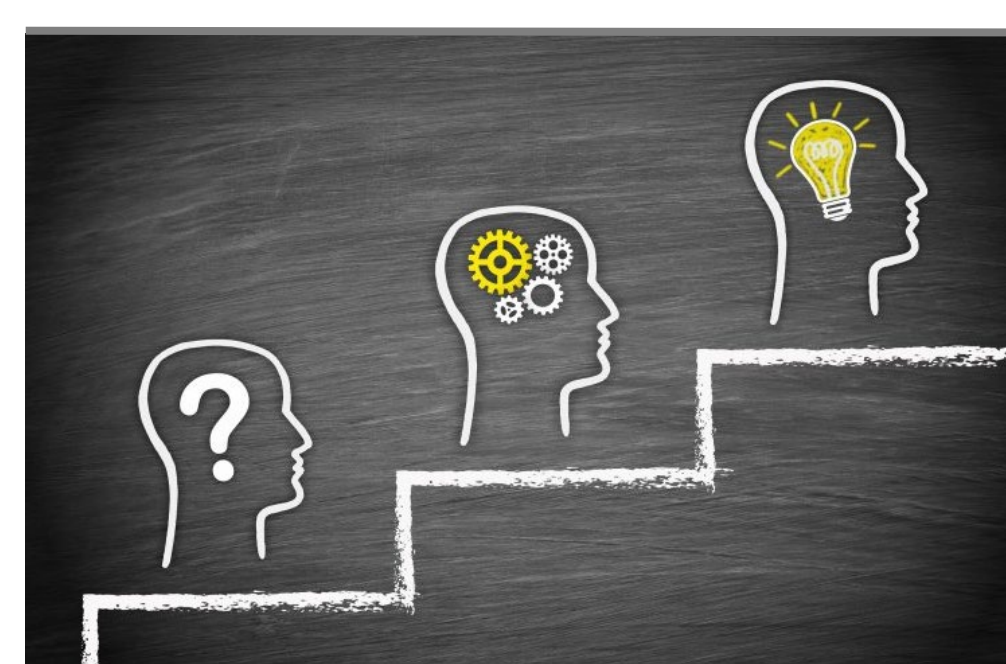
## Children & Probabilities



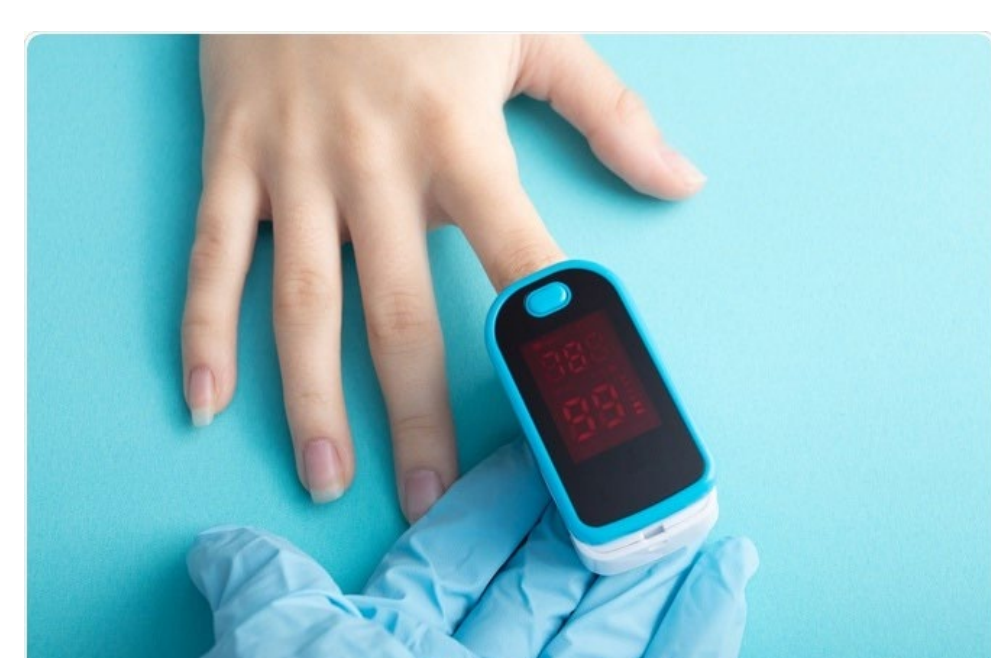
## Forecasting



## Counterfactual reasoning



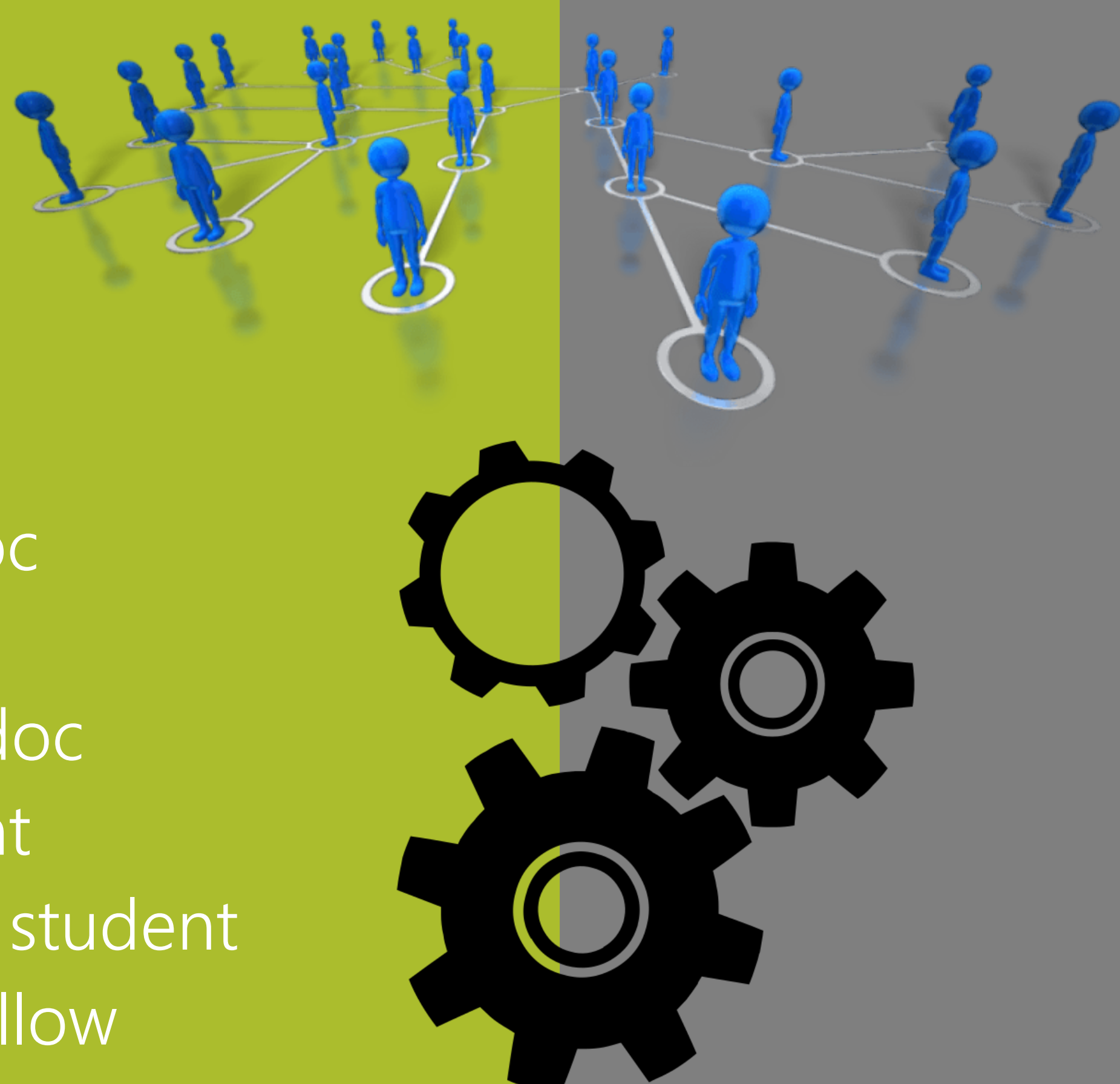
## Decision improvement



## Decision under stress

## Who are we?

- Katya Tentori, PhD, PI
- Stefania Pighin, PhD, PI
- Sarah Placì, Post-doc
- Ben Timberlake, Post-doc
- Flavia Filimon, Post-doc
- Andrea Dissegna, Post-doc
- Stefano Fait, PhD student
- Alessandro Bogani, PhD student
- Omar Coser, research fellow
- Alessia Caponio, Master's student



## Whom do we work with?

- Ruth Byrne, Trinity College (Ireland)
- Nick Chater, Warwick Business School (UK)
- Vincenzo Crupi, University of Torino (Italy)
- Donatella Ferrante, University of Trieste (Italy)
- Cinzia Chiandetti, University of Trieste (Italy)
- David Lagnado, University College London (UK)
- Daniel Osherson, Princeton University (USA)
- Andrea Passerini, University of Trento (Italy)
- Ilana Ritov, Hebrew University (Israel)
- Lucia Savadori, University of Trento (Italy)