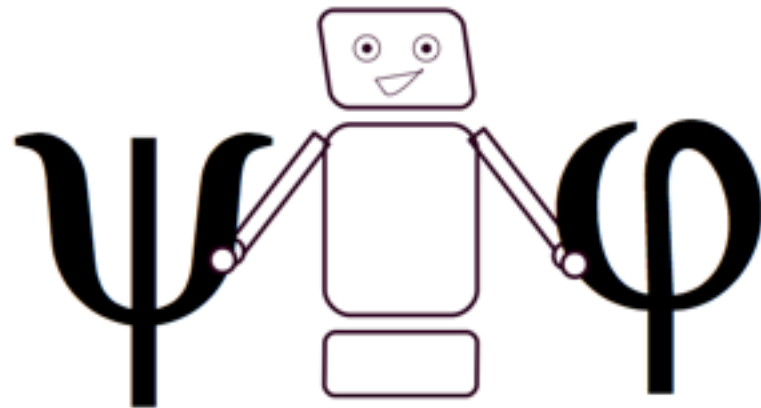


Human-Robot Joint Action

Refining the understanding of joint action through an interdisciplinary perspective

September 19th 2018, Paris

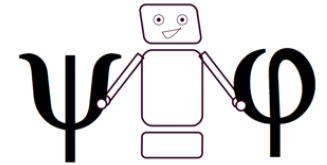




Joint Action for Human-Robot Interaction

JointAction4HRI

Consortium



JointAction4HRI

■ LAAS-CNRS (Toulouse)

- Rachid Alami (coordinator), DR CNRS
- Aurélie Clodic, IR CNRS
- Amandine Mayima, PhD student



■ Institut Jean Nicod (Paris)

- Elisabeth Pacherie, DR CNRS
- Víctor Fernández Castro, PostDoc (will be at LAAS next year !)

Institut | Nicod
CNRS-EHESS-ENS

■ CLLE (Toulouse)

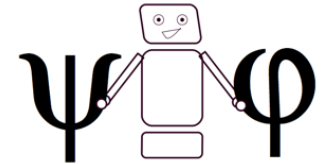
- Michèle Guidetti, Professor
- Hélène Cochet, Lecturer
- Kathleen Belhassein, PhD student (co-advised with LAAS)



Institut | Nicod
CNRS-EHESS-ENS



Context



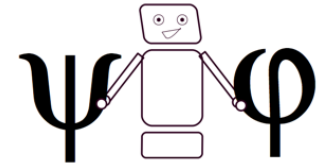
JointAction4HRI

- In a foreseeable future, humans and robots are set to **act together** and even to **collaborate**.
- All the agents concerned, **both the human AND the robot**, will have to **build and to maintain, co-constructively**, and as long as necessary, **the collaborative process** and relationship that come along with the task, thus allowing its joint execution.
- Such a process must be **flexible, adaptable** enough, so any of the agents, human or (even) robots, could make mistakes, fail locally, speed up or slow down, change their "mind", modify their decisions, etc., along the way, without undermining the interaction.

=> Build a solid and comprehensive theoretical framework

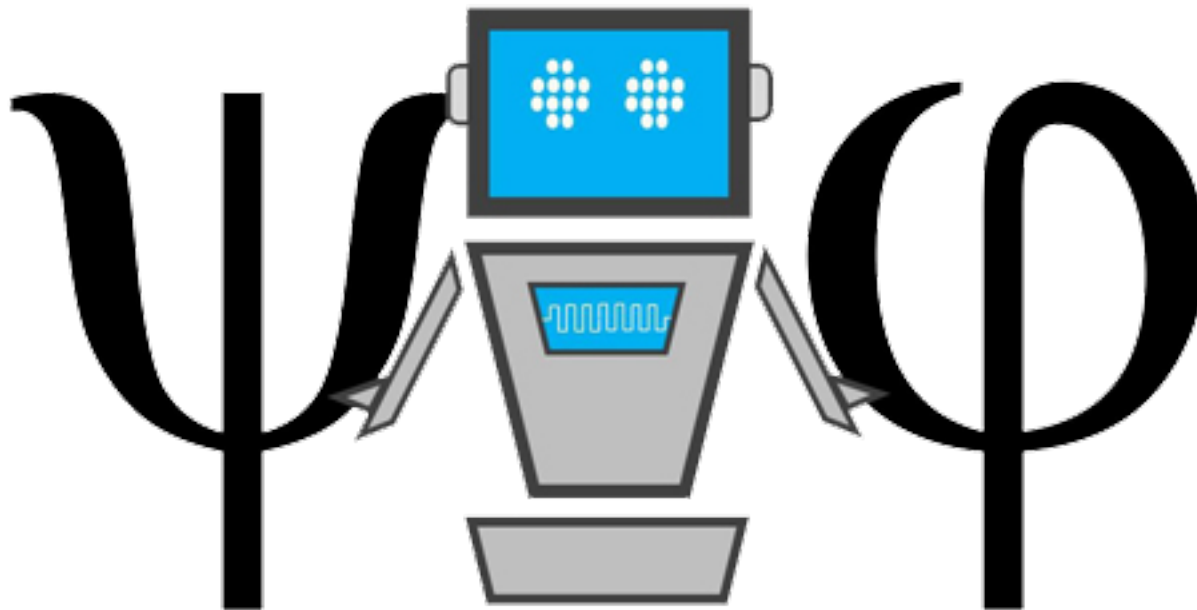


Objectives



JointAction4HRI

- Identifying the elements (and their interactions) that allow the **establishment and maintenance of mutual understanding between a human and a robot** in a collaborative task
- **Modeling the notion of commitment** that structures the relationship between two interacting agents
- **Elaborate and test robotics architecture** design for collaboration with humans



Human-Robot Joint Action

Refining the understanding of joint action through an interdisciplinary perspective

September 19th 2018, Paris

Program 1 / 2

9:45 On a Multidisciplinary Analysis of Joint Activity
Kathleen Belhassein - LAAS-CNRS & CLLE LTC

10:15 Discussion Moderator : Michele Guidetti

10:45 Coffee break

11:15 Natural Interactions: Theoretical and Motor Aspects of JointAction4HRI
Stephen Butterfill - University of Warwick

11:45 Discussion Moderator : H el ene Cochet

12:00 Narrative structuring of experience for extended social interactions in humans and robots

Peter Ford Dominey - INSERM & CNRS

12:30 Discussion Moderator : Rachid Alami



Program 2/2

14:00 Joint Actions, Commitments and Need to Belong
V́ctor Ferńandez Castro - University of Granada / Jean Nicod Institute

14:35 Discussion Moderator : Elisabeth Pacherie

14:45 Ingredients of Joint Action: A View from Cognitive Psychology
Guenther Knoblich - Central European University

15:15 Discussion Moderator : Aurélie Clodic

15:30 Coffee break

16:00 Panel

17:30 End

