



## Field-Robotics workshop:

*From Mobile Platforms Testing & performance validation;  
To AI-enabled robotics applications in agri-food*

An event jointly organized by CNRS-2RM and agROBOfood networks:  
Wednesday-Thursday, 12-13 October 2022  
INRAE AgroTechnopôle facilities, Montoldre, Clermont-Ferrand, 03150 France

The France-Italy regional cluster of [AgROBOfood](#) and [CNRS-2RM](#) networks together with [INRAE](#) organise a joint 2-day event (12-13 of October) on the AgroTechnopôle facilities of INRAE, at Montoldre, Clermont-Ferrand, France. The workshop will be held on 13 October and will be delivered in English, with the dual focus of:

- 1- to share knowledge and to demonstrate some of the existing tools and practices related to the Testing and Performance validation of mobile field robots, and
- 2- to exchange on the existing and emerging robotics capabilities, which can be enabled by Artificial Intelligence in agri-food application domains.

The workshop is open to agROBOfood network as well as the participants of the local event organised by INRAE and CNRS-2RM planned for 12 October. The focus of this latter event is on the French national approaches for the sharing of experiences, tools and infrastructures that are necessary for experimental field robotics: *“Journée robotique Mobile du réseau 2RM: Vers la mutualisation d’outils de développement expérimentaux.”*

The presentations of the first-day event will be mainly in French but based on English slides. Questions, answers, and discussions will follow in English.

Draft programmes of the **second day** of the event is enclosed to this document; for the content of the **first day** visit: <http://robmob22.ip.uca.fr/index.php>

Participation is free but registration before 01/10/2022 is necessary. All interested participants can attend both events. Please send your request for registration or any questions you may have to [farzam.ranibaran@cea.fr](mailto:farzam.ranibaran@cea.fr) or [frederic.colledani@cea.fr](mailto:frederic.colledani@cea.fr)

Enclosure/



## Preliminary Programme (Day-2)

An event jointly organized by CNRS-2RM and agROBOfood networks:  
Thursday, 13 October 2022

INRAE AgroTechnopôle facilities, Montoldre, Clermont-Ferrand, 03150 France

### 8:20 Common transport from Vichy to Montoldre site

### 9:00 Session 1: Introductory presentations:

- Welcome address (CEA)
- An overview of AgROBOfood network (CEA)
- Showcasing of selected FSTP projects in agROBOfood (3 projects in FR-IT Regional Cluster):
  - o HyflexyBot: <https://agrobofood.eu/ic-experiments/hyflexybot/>
  - o MIRAGE: <https://agrobofood.eu/oc2-experiments/mirage/>
  - o TOMMIE: [Automating Crop Load Management in Apple Orchards](#)
- Synopsis of the Market Study conducted under agROBOfood: robotics in agri-food (CEA)

### 10:30 Break (15')

### 10:45 Session 2: General Keynote Presentations (Artificial Intelligence; Robotics regulatory, and standardization needs and requirements)

- Overview of Artificial Intelligence (*Speaker TBC*)
  - o Promises, achievements, existing capabilities and outlook for future possibilities
- Overview of EU regulations and plans related to machines working at various degrees of autonomy and interactions with people:
  - o Perspectives from EU Regulatory Authorities (*Speaker TBC*)
  - o Perspectives from user communities and practitioners: (*Speaker TBC*)

### 12:00 Session 3: Safety and Performance Assessment for collaborative and field robotics:

- Presentation of COVR (*Dr Marcello Valori, CNR, Italy*)
- Presentation of ARPA and live demonstrations (*Christophe Debain, INRAE, France*)

### 12:45 Lunch

### 14:00 Session 4: Topical Keynotes: Highlights from applied AI and Robotics in agri-food

- AI-enabled detection and classification: phenotypes, leaves, fruits, insects: *Prof. Daniele Nardi, Sapienza University of Rome*
- Specialized grippers: grasping, soft-object handling (*Yann Perrot, CEA*)
- Navigation and localization (*Ashley Hill, INRAE/CEA*)
- Live demonstrations (INRAE, TBC)

15:40 closing remarks

### 16:00 Return to Vichy