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Local Organizing and Scientific Committee:

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Conference website:

www.rhea-conference.eu/2012



Welcome to the first RHEA Conference:

RHEA-2012 is being fostered by the project RHEA (Robot fleets for highly effective agriculture and forestry management, FP7-NMP 245986). The RHEA consortium comprises a number of research centres, universities, and companies funded by the European Commission through the Seventh Framework Programme to develop robotic fleets for weed control and pesticide management in agriculture and forestry.

Location:

Pisa is World famous for its Leaning Tower and Cathedral (inscribed on the UNESCO World Heritage List) and its many other medieval and Renaissance monuments. It is located in Tuscany, in the central part of the Italian peninsula, on a plain near the coast of the Mediterranean Sea close to the mouth of the river Arno.

The university buildings are located in the city itself, some in monumental historical buildings and others in new modern constructions.

Who are interested in?

Scientists and technicians, students, private firms and other people interested in sustainable crop-protection, weed control, automation in agricultural machinery, robotics application in agriculture and precision farming.







First International Conference on Robotics and associated High-technologies

and Equipment for Agriculture

"Applications of automated systems and robotics for crop protection in sustainable precision agriculture" RHEA-2012



Pisa, Italy September 19 - 20 - 21 2012



Conference Topics:

Theme 1: Strategies and tools for precision agriculture

- Topic 1.1: <u>Automated machines for chemical weed control</u> *Keywords: Reduced herbicides distribution, Innovative Sprayers*
- Topic 1.2: <u>Automated machines for physical weed control</u> *Keywords: Thermal tools, Mechanical tools, Innovative machines for PWC*
- Topic 1.3: <u>Automated machines for tree crop protection</u> *Keywords: Reduced pesticide distribution, innovative machine for pesticide application in tree crops*
- Topic 1.4:<u>Agronomical, economical and safety impacts of</u> automated machines use

Keywords: Automated machines safety, agronomical evaluation of automation in agriculture, economical evaluation of automation in agriculture

Theme 2: Automation and robotics for precision agriculture

Topic 2.1: <u>Design and control of automated agricultural vehicles</u> <u>and systems</u> <u>Keywords: Ground mobile machines, Flying mobile</u>

machines, Simulation tools Topic 2.2: <u>Computer vision and image analysis in agricultural</u>

processes

Keywords: Weed/crop discrimination, Crop row detection, Computer vision for guidance, Advanced procedures for image analysis of remotely sensed data in cropping systems

Topic 2.3: <u>ICT technologies in precision agriculture</u> *Keywords: Communication systems, Localization systems, Management and supervision, Mission planning*

Conference website:

Guidelines, formats, templates and additional information are available on the RHEA conference website: <u>http://rhea-conference.eu/2012</u>.

Abstracts:

First submission of 500 words abstract with revision by the members of the scientific committee. The template is available at the RHEA Conference website

Papers:

Second submission with revision of maximum six pages including figures, tables, schemes, etc. with new revision by the members of the scientific committee and/or after external peer reviewing. Final submission template will be available at the RHEA Conference website.

Deadlines Abstract and Papers:

 Deadline for abstract submission 	February 28, 2012
- Notification of acceptance	March 31, 2012
- Full paper electronic submission	April 30, 2012

- Notification of final acceptance......May 31, 2012

Fees:

(including lunches, dinners, coffee breaks and Social events)

Payment before April 30, 2012 Participant: 450 euro Student: 250 euro Payment after April 30, 2012 Participant: 600 euro Student: 300 euro

Payment by bank transfer to: **"Agricultural Engineering Conferences Organization Committee – MAMA DAGA – UP"** For UE Countries using Euro: **IBAN: IT85P0572814092492570864151** For UE Countries not using Euro and other not UE Countries: **IBAN: IT85P057281409249257086415 SWIFT code: BPVIIT21492**

Accommodation:

Information about agreed hotels and accommodation in Pisa and along the coast can be found on the RHEA Conference website www.rhea-conference.eu/2012

Provisional programme:

<u>First day</u>	
9:00 - 9:00	Opening session
9:15 - 10:00	Plenary session "weed scientist/ agronomist"
10:00 - 10:30	Coffee break
10:30 - 12:00	3 parallel sessions
12:00 - 14:00	Lunch
14:00 - 15:30	3 parallel sessions
15:30 - 16:00	Coffee break
17:00 - 19:30	Visit to the CIRAA "E.Avanzi" of UP machine exibition
20:00	"Rural dinner" at the CIRAA "E.Avanzi"
Second Day	
9:15 - 10:00	Plenary session "robotics scientist"
10:00 - 10:30	Coffee break
10:30 - 12:00	3 parallel sessions
12:00 - 14:00	Lunch
14:00 - 15:30	3 parallel sessions
15:30 - 16:00	Coffee break
17:30 – 19:30	Pisa sight-city tour visit to the Certosa Calci Natural Museum
20:30	Conference "gala" dinner
<u>Third Day</u>	
9:00 - 10:15	3 parallel sessions
10:15 - 10:45	Coffee break

- 10:45 11:45 3 parallel sessions
- 11:45 12:15 Closing session
- 12:15 14:00 Lunch

14:30 - 19:30

Excursion (to be booked and paid in advance)

