

Biotremology 2016



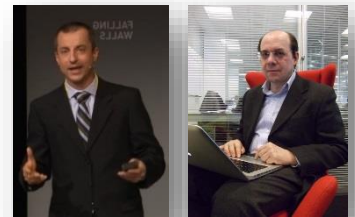
Workshop

# Engineering, mechanics and informatics meet entomology: communication, interference and disruption by vibrational signals

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In this workshop we want to explore the possibility of introducing an engineering and informatics approach for the optimization of systems aimed at interfering/interacting with insects, both for laboratorial scale experiments and field practical applications. Different factors in both temporal and spectral patterns of the signals, and that are related to specific features of the insect/plant system (e.g. trellis, physiology, phenology etc) are crucial in determining a positive behavioural response in the animal. This means to obtain an effective conditioning of the individual decisions that can vary from simple duetting with them to attracting or even disrupting their mating behaviour. We will discuss how mechanical engineers and informaticians should approach this topic and then integrate it into the entomological problems.

The workshop is open to expertise in the following fields:

- Bioacoustics
  - Solid mechanics (vibrations)
  - Computational mechanics, computer aided engineering
  - Information and communications technology
  - Interactive systems
  - Digital signal processing
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