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# GT2 - Drones

Group Inter-GDR (Control theory and Robotics)

Coordinators

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Bring together researchers from both industrial and scientific communities around the UAV (unmanned Aerial Vehicles) specific challenges to

- identify pertinent practical and theoretical open issues, as well as efficient implementations in practical applications.
- establish and assess methodological and technological advances for the full autonomy of these vehicles.
- GT2-drones/GT UAV « inter GdR Robotique and MACS » since 2008 with 2 meetings per year (30 to 40 participants on average)
- **Laboratories, universities, institutions, industries participation:**  
IBISC, HEUDIASYC (UTC), I3S, LSIIT, CEA LIST, ONERA, DGA, CNES, Ecole des mines de Paris, CREA (UPJV), USTL, CRAN, IRISA, INRIA, ENSEA, ENIM, LASMEA, LISV, ENSAM, GIPSA, LSIS, University of Orléans, ENS Cachan, SUPELEC, THALES, Dassault Aviation, Bertin  
UMI LAFMIA
- Meetings of researchers in both communities **Robotics and Control**, about the subjects « **aerial vehicles and drones** ». Place of exchanges.  
Participation of PhD students

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- ✓ Modelling
  - ✓ Control
  - ✓ Sensory-based control
  - ✓ Data filtering and state estimation
  - ✓ Decision and autonomous systems planification
  - ✓ Diagnosis and reconfigurable control

- **Meeting of March 26, 2009** (42 participants)
  - Participation of industrial partners
    - Daniel Trouchet (Bertin Technologies), Bruno Patin (Dassault), Gaël Desile (Thales)
  - Talks of PhD students and researchers
    - B. Herissé (CEA), G. Sanahuja (Heudiasyc), K. Benzemrane (IBISC), H. Rafarahaly (CRAN), F. Ruffier (ISM), P. Fabiani (ONERA)

- **Meeting of November 12, 2009** (28 participants)

Theme « **Visual servoing and vision for aerial vehicles** »

- François Chaumette (INRIA Rennes), José-Raoul Azenheira (IST, Lisbonne), Sébastien Clerc (Thales Alenia Space), Jean-Christophe Zufferey (EPFL, Suisse), Isabelle Fantoni (Heudiasyc, UTC)

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- Meeting of April 1st, 2010 (35 participants)
    - Talks of researchers
      - Stéphane Doncieux (ISIR), Jérôme de Miras (Heudiasyc), Guillaume Ducard (I3S), Philippe Martin (CAS, Mines Paris Tech)
    - Talks of PhD students
      - Céline Teulière (CEA), Walid Achour (ONERA)
  - Meeting of September 16, 2010 (20 participants)
    - IMA, Bordeaux, UAV Show Europe
    - Talks of researchers
      - Pierre Melchior (Université de Bordeaux), Magali Barbier (ONERA), Serge Chaumette (LaBRI), Stéphane Viollet (ISM), Yoko Watanabe (présenté par Magali Barbier, ONERA)
    - **Visit of the UAV Show Europe**

- Organisation of 2 meetings per year
  - ✓ Themes
  - ✓ Presentation of speakers from industries
  - ✓ Invitation of foreign researchers, young researchers, PhD students
- Edition of 2 special numbers in journals (Autonomous Robots'09 , Control Engineering Practice'10)
- Organisation of invited sessions
  - CIFA 2010: session « Aerial vehicles », CIFA 2012,
  - CDC 2009, IROS 2008,
  - Workshop on the UAVs (IROS 2009, MED'2010, UAV'2010, ...)
- Organisation of a national conference in 2011