

Title: Robust vision based landing of aerial vehicles

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Vision based control refers to the use of computer vision in the guidance and control loops. Researches in this field are driven by the needs of many applicative fields such as robotics and aerospace. In this open invited track session, we will focus on the landing phase of aerial vehicles. This track will offer the opportunity to present some recent results on vision based control and their applications to the problem of landing softly and precisely. This vehicle may land on partially unknown and/or even moving areas.

The vision based control schemes may be studied in the presence of:

- calibration errors
- biased velocities
- sampled delayed image measurements.

Topics of the track will include but are not limited to:

- Vision based landing of fixed-wing aircrafts (some papers related to the Visioland project will be probably presented <http://w3.onera.fr/visioland/node/92>)
- Vision based landing of an autonomous helicopter on a moving platform
- Vision based landing of UAVs

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