

216 Seminar 8-5-2014

**Speaker:** Sergi Foix ([sfoix \(at\) iri.upc.edu](mailto:sfoix@iri.upc.edu))

**Title:** *Coding leaf exploratory tasks under 3D occupancy-based models*

**Abstract:**

In this talk I will present some recent advances on my research in active viewpoint planning for gathering data from an unexplored free-form and non-rigid 3D complex scenario. The aim of this research is to provide a general task-oriented approach based on information-gain maximization that easily deals with such a problem. In particular for this talk, I will show the advances on how to encode viewpoint planning in 3D occupancy models with the purpose of identifying available probing points in leaves. In overall terms, the approach consists of repetitively ranking a given set of possible viewpoints, based on their task-related gains, and then move to the best-ranked vantage point until the exploratory task termination criterion is achieved.