

Localisation and control of a group of underwater robots

*Journées robots sous-marins à Ifremer,
Toulon le 8 avril 2015*

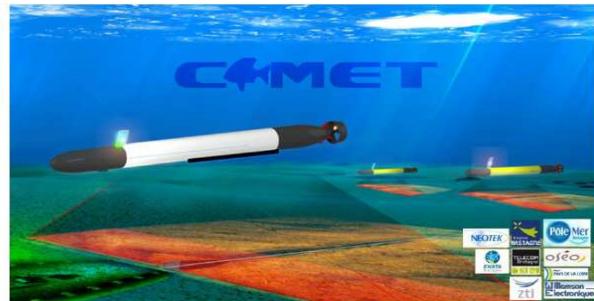
ENSTA Bretagne, LabSTICC, OSM.

L. Jaulin, C. Aubry, S. Rohou, B. Zerr,
M. Saad, J. Nicola, F. Le bars, RT sys

Video available at

<http://youtu.be/ATPabRHz0LA>

1 Comet



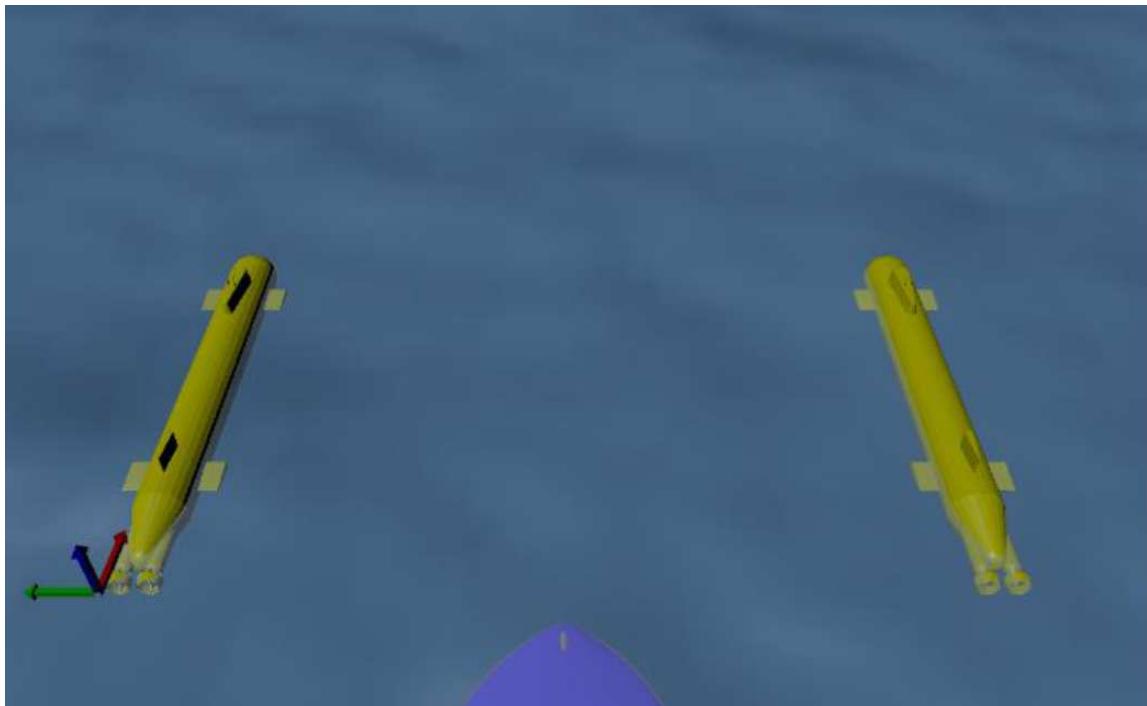
Goal : (i) coordination of underwater robots ; (ii) collaborative behavior.

2 Scout project

Supervisors: L. Jaulin, C. Aubry, S. Rohou, B. Zerr, J. Nicola, F. Le bars

Compagny: RTsys (P. Raude)

Students: G. Ricciardelli, L. Devigne, C. Guillemot, S. Pommier, T. Viravau, T. Le Mezo, B. Sultan, B. Moura, M. Fadlane, A. Bellaiche, T. Blanchard, U. Da rocha, G. Pinto, K. Machado.

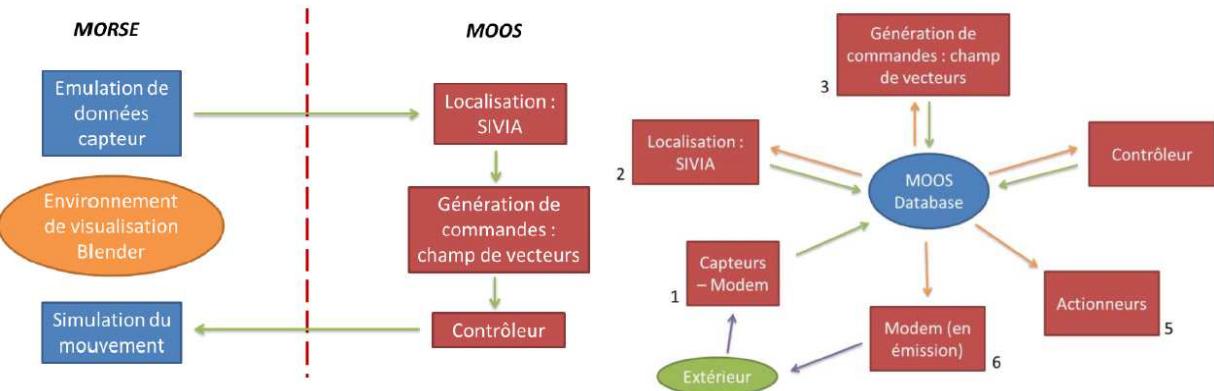




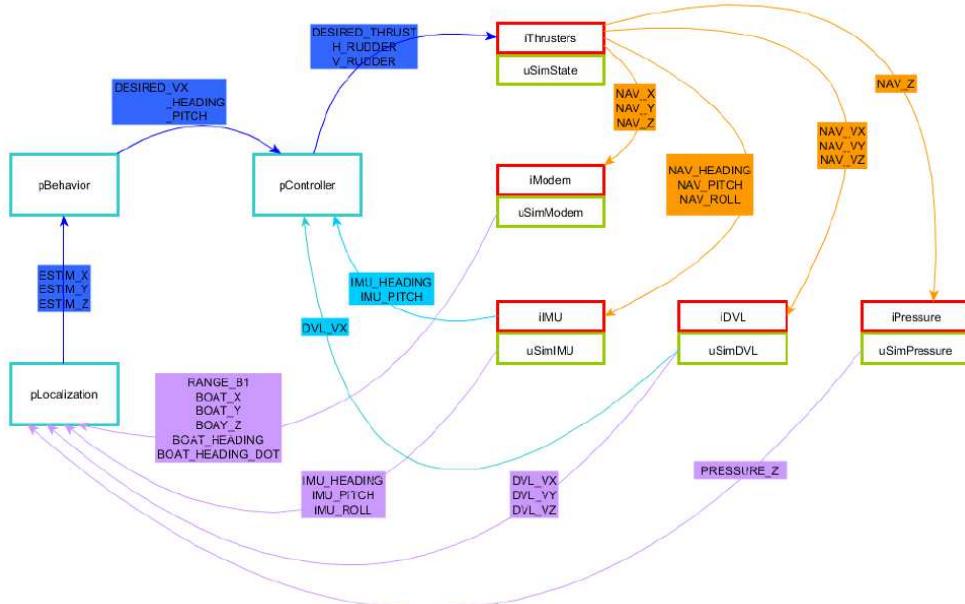




3 Simulator

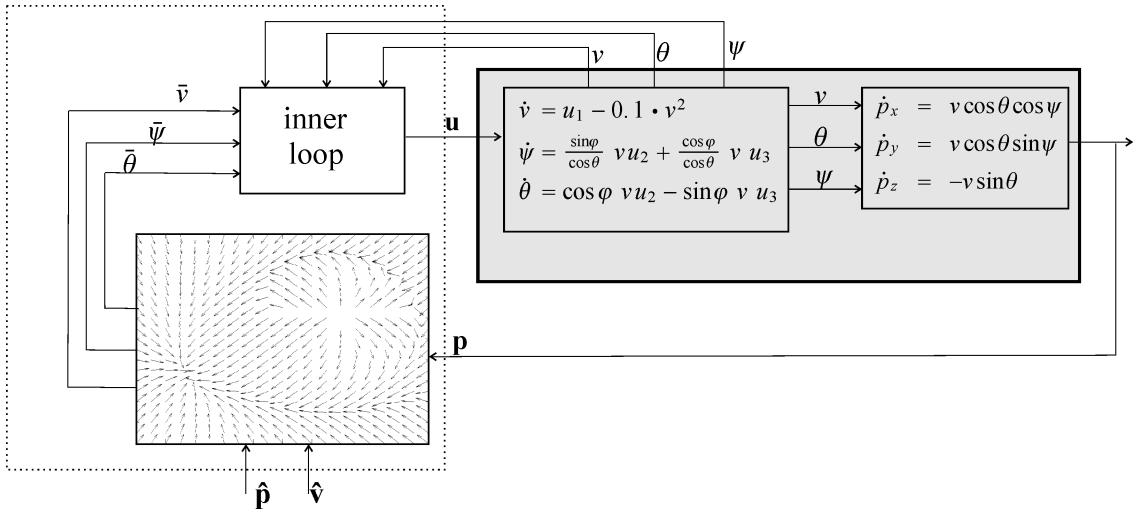


MOOS, MORSE, BLENDER, IBEX, Vibes, GIT



MOOS architecture

4 Controller



5 Localization

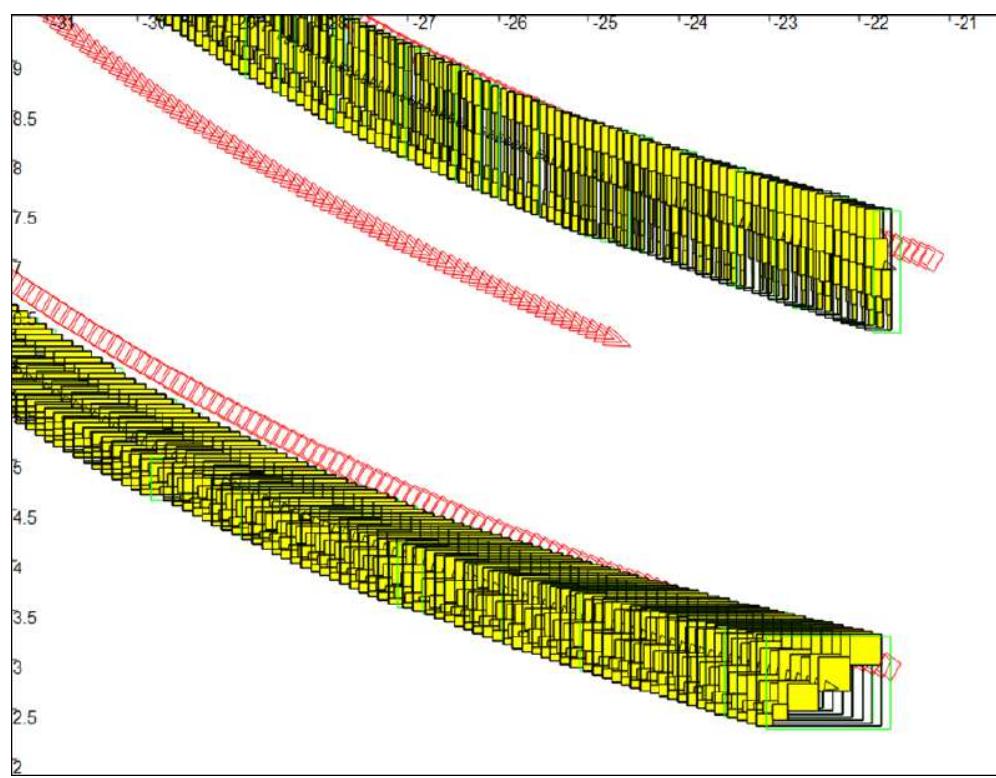
Range only

Based on interval analysis

Robust with respect to outliers

Distributed computation

Low rate communication



6 Tests

