# Horizon 2020 Brokerage Event on the 2016-topics of Software & Cloud



### Participant presentation session





## Rmod team University Lille 1 - Inria



- Research team famous in the world for its work on:
  - dynamic languages, language design, reflective programming, security, Smalltalk, Pharo, software evolution, reengineering, software analysis, program visualization, meta modeling, Moose.
- Expertise 1: Software evolution
  - How to maintain/evolve large software systems?
- Expertise 2: Dynamic languages for eternal systems
  - Revisiting fundamental aspects of OO languages



### **Software evolution**



#### Keywords:

 code analysis, metamodeling, software metrics, program understanding, program visualization, evolution analysis, refactorings, legacy code, quality, ...

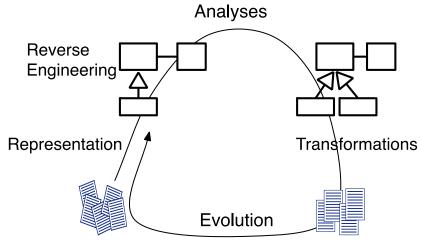
#### Current focus

Remodularization analyses
 (Thales Air Systems, Siemens),
 Language migration, Rule and
 bug assessment, Towards
 semantic merge

#### Collaborations

 Soft-VUB (Belgium), Pleiad (Chile) UFMG (Brazil), SCG (Swiss), LIRMM

- Identified Call
  - ICT-10: Software technologies







## Dynamic languages for eternal system



- Keywords:
  - Reflective Programming, Hot update, Cloud
- Current focus
  - First class slots, Remote Debugging, Rethinking metaobjects and their control
- Collaborations
  - Soft-VUB (Belgium), Pleiad (Chile), Ecole des Mines de Douai
- Identified Call
  - ICT-10: Software technologies
  - ICT-3: SSI Smart System Integration