

Seminar Labex MS2T  
“Control of Technological Systems of Systems”

<http://www.utc.fr/labexms2t/>

**Rodolphe Leriche**, CNRS permanent researcher and  
the leader of the DEMO team at Ecole des Mines de St-Etienne  
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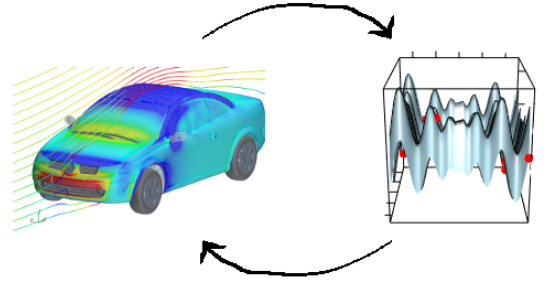


## Optimizing with realistic simulators and metamodels

### Abstract:

Metamodels are statistical models of physical models. The combination of meta and physical models is the most general approach to optimizing realistic systems. In our research group in St-Etienne, we have been studying metamodels for optimization in the last decade, targeting 3 key properties : the optimization search should be global in scope ; the search should accommodate uncertainties underlying the physical simulation; the algorithms should scale well in distributed computing environments.

In this talk, I will give an overview of the related works.



### Short Bio:



Rodolphe Le Riche likes to think of himself as a designer of mathematical methods that, in the end, serve to design objects.

His research deals with global optimization approaches in the context of engineering applications where numerical simulations and expert knowledge are available.

His is currently a CNRS permanent researcher and the leader of the DEMO (Decision in the Enterprise, Modeling, Optimization) team at the Ecole des Mines de Saint-Etienne.

He once was a student at UTC.