

PRESSE RELEASE

The EADS foundation, the École Polytechnique, and the INRIA (the French National Institute for Research in Computer Science and Control) enter into a partnership by creating an academic/research chair entitled "Mathematical Modeling and Numerical Simulation".

The dual aim of this chair is to encourage innovative and original research in mathematical modeling and numerical simulation and to develop education in this field by increasing the flow of students from Polytechnique and other universities towards the corresponding Master and PhD programs. The chair will set its sights on excellence in research and a higher degree of international recognition for the École Polytechnique, the INRIA, and the EADS Foundation.

Let us bear in mind that mathematical modeling is the art of representing physical reality through abstract models open to analysis and calculation, while numerical simulation is the process of calculating the solutions to these models on a computer thus simulating physical reality. The continual increase of computer power concomitant with the growing scientific and industrial demands in the simulation and numerical prediction of complex systems have lead to an unprecedented development of mathematics used to address these issues. The fields covered are numerous: analysis of partial differential equations, numerical analysis, scientific computing, optimization and control, signal and information processing, etc.

The chair will particularly focus on multiscale and multidisciplinary problems: i.e. problems where several scales of time and space intervene simultaneously and/or which call upon or pair several scientific fields.

The chair's activities will be organized around three axes: education, research and scientific dissemination. A flagship activity of the chair will be the setup of a truly international Masters and PhD program of world-class level.

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