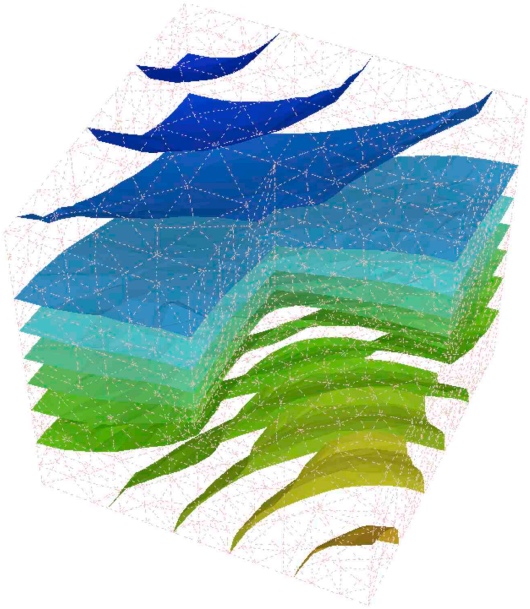

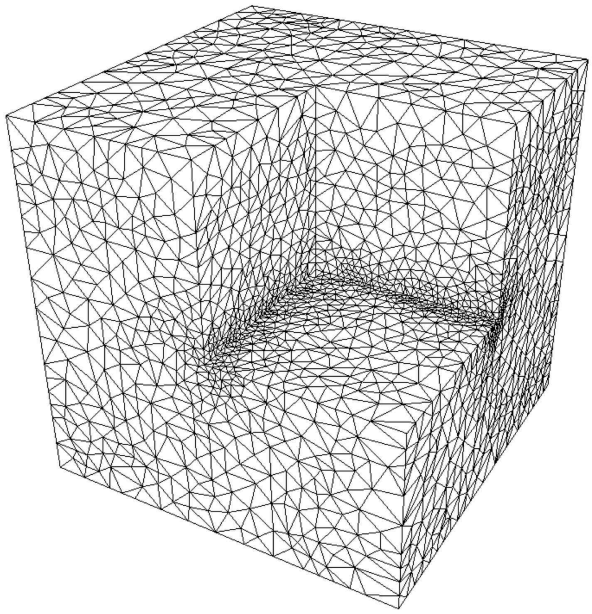

Fourth FreeFem workshop on Generic Solver for PDEs: FreeFem++ and Applications
Paris, 6,7 December, 2012

Key features:

FreeFem++ (*) is now used as research tool or investigation software by a continuously increasing community gathering scientists from different areas of research (mathematics, physics, finance, mechanics, industry, etc). Following the success of the previous workshops on FreeFem++, this new event is aimed to reflect the latest new capabilities and applications of the software and to exchange information with other communities involved in the development of generic solvers for PDEs.

The focus will be given to:

- Highlight the most recent advances in developing generic solvers for PDEs,
- Present the latest capabilities of FreeFem++ to solve PDEs using finite element methods,
- Show how an academic solver could be used for industrial applications,
- Help researchers to develop their own applications using FreeFem++.

The Workshop will be hosted at University Pierre et Marie Curie and will include (In construction schedule):

- *A conference session including academic and industrial research,*
- *A training session for beginners or advanced users of FreeFem++,*
- *A (brainstorming) working session intended to solve computational problems proposed by academic or industrial participants.*

(*) FreeFem++ is a free software dedicated to numerically solve partial differential equations (PDEs) in two o three dimensions of space, using a large variety of finite elements, including discontinuous elements.

FreeFem++ is an integrated product with its own high level programming language, with an easy-to-use syntax close to mathematical formulations. Many appealing features are present in the software: an advanced automati mesh generator, capable of mesh adaptation, a general purpose elliptic solver interfaced with fast algorithms such as UMFPACK, SuperLU, high performance (parallel) computing, etc.

Applications of FreeFem++ range from scholar cases to academic research and industrial problems.More information about FreeFem++ could be found at http://www.freefem.org/ff++

Scientific and steering Committee

Grégoire Allaire, CMAP, Ecole polytechnique	Frédéric Hecht, LJLL, Université Pierre et Marie Curie
Frédéric Coquel, CMAP, , Ecole polytechnique	Yvon Maday, LJLL, Université Pierre et Marie Curie
Ionut Danaila, LJLL, Université Pierre et Marie Curie	Bertrand Maury, Université Paris Sud-Orsay
Pascal Frey, LJLL, Université Pierre et Marie Curie	Olivier Pironneau, LJLL, Université Pierre et Marie Curie