

综合报告会

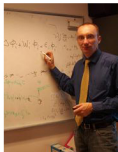
Lecture

国家数学与交叉科学中心

Friday, October 21, 2011

3:30 pm - 4:50 pm, S712

Computational multiscale materials science: some highlights



Speaker: Prof. Claude Le Bris

Ecole des Ponts- ParisTech and INRIA, France

Abstract:

The talk will overview, from a mathematical and numerical perspective, some challenging computational problems in contemporary materials science. All scales will be covered, from the microscopic scale, with electronic structure theory calculations, to the macroscopic scale, with the mechanics of complex materials. Some examples will be taken in both the solid and the liquid phases. Some recent mathematical and numerical achievements will be reviewed.

Brief CV:

Claude Le Bris obtained his Doctoral degree at Ecole Polytechnique in France in 1993. He is a leading expert on the mathematics and the numerical approaches for multiscale materials science. His professional activities include positions as Civil Engineer-in-Chief and Research Scientist at Ecole Nationale des Ponts et Chaussées, as well as scientific leader of the MICMAC project at INRIA. He has been a member of several Scientific Program Committees of international conferences and thematic years. He has an extensive editorial activity. He is the author of five books, 120 papers in international journals, books and conference proceedings and has given about a hundred invited lectures at international conferences. Among other honors, he has been awarded the Blaise Pascal Prize 1999 from the French Academy of Sciences, the Giovanni Sacchi-Landriani Prize 2002 from the Lombard Academy of Arts and Sciences. He has been an invited speaker at the International Congress of Mathematicians 2006, Madrid, a Distinguished Ordway Visitor 2008, at the University of Minnesota, an Aisenstadt Chair 2009 at the Université de Montréal, and the Charles J. Amick Memorial Lecturer 2010 at the University of Chicago.