Numerical methods in finance : Bordeaux, June 2010

Abstrak

Based on presentations given at the workshop Numerical methods in finance held at the INRIA Bordeaux (France) on June 1-2, 2010, this book provides an overview of the major new advances in the numerical treatment of instruments with American exercises. Naturally it covers the most recent research on the mathematical theory and the practical applications of optimal stopping problems as they relate to financial applications. By extension, it also provides an original treatment of Monte Carlo methods for the recursive computation of conditional expectations and solutions of BSDEs and generalized multiple optimal stopping problems and their applications to the valuation of energy derivatives and assets. The book is geared toward quantitative analysts, probabilists, and applied mathematicians interested in financial applications.