Almost sure central limit theorem for martingales

JEAN CLAUDE FORT Laboratoire de Statistique et Probabilits Université Paul Sabatier, Toulouse

Abstract

We extend the ASCLT for martingales with a vanishing explosion coefficient (obtained by Chaabane). Then we prove a new result for martingales with explosion coefficient converging toward f, 0 < f < 1. The method relies on the application of the Carleman condition on moments ensuring the convergence in distribution. These results are illustrated by some examples.