ASSOCIATION CRITERIA FOR M-INFINITELY-DIVISIBLE AND U-INFINITELY-DIVISIBLE RANDOM SETS

JOANNA KARŁOWSKA-PIK
TOMASZ SCHREIBER

Abstract: We study random convex compact sets infinitely divisible with respect to the Minkowski addition and establish a sufficient condition for their association as well as a necessary and sufficient condition for the so-called infinite association. Further, we show also that every union infinitely-divisible random closed set and every convex compact set infinitely divisible for convex hulls of unions are associated.

2000 AMS Mathematics Subject Classification: Primary: 60D05; Secondary: 60E07.

Keywords and phrases: Association, infinite association, M-infinite-divisibility, U-infinite-divisibility, infinite divisibility for convex hulls of unions, random closed set, random convex compact set.

THE FULL TEXT IS AVAILABLE HERE