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自正则部分和精确渐近性的一般结果

陆振刚¹, 姜玉秋²

1. 四平职业大学--宣传部, 吉林--四平 136002;
2. 吉林师范大学--数学学院, 吉林--四平 136000

General result on precise asymptotics for self-normalized sums

LU Zhen-gang¹, JIANG Yu-qiu²

1. Propaganda Department, Siping Professional College, Siping Jilin 136002, China;
2. College of Mathematics, Jilin Normal University, Siping Jilin 136000, China

- 摘要
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全文: PDF (348 KB) HTML (1 KB) 输出: BibTeX | EndNote (RIS) 背景资料

摘要 设一零均值非退化、属于正态吸引域的独立同分布随机变量序列, 利用独立序列的弱收敛定理和尾概率不等式, 对于更为广泛的边界函数, 证明了其自正则部分和精确渐近性的一般结果, 揭示了拟权函数、边界函数、收敛速度和极限值之间的关系, 改进并推广了已有的结果.

关键词: 精确渐近性 自正则和 一般结果 独立同分布

Abstract: Given a sequence of i.i.d. ~nondegenerate random variables with zero means and belonging to the domain of attraction of the normal law, by the weak convergence theorem and the tail probability inequalities of the independent and identically distributed sequence, a general result on precise asymptotics for the self-normalized sums with generalized boundary functions has been proved. It can describe the relations among the weighted function, boundary function, convergence rate and limit value, then the known results of this field are improved and extended.

Key words: precise asymptotics self-normalized sums a general result independent and identically distributed (i.i.d.)

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