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***On the Borel-Cantelli Lemma and moments***

Comment.Math.Univ.Carolin. 47,4 (2006) 669-679.

**Abstract:** We present some extensions of the Borel-Cantelli Lemma in terms of moments. Our result can be viewed as a new improvement to the Borel-Cantelli Lemma. Our proofs are based on the expansion of moments of some partial sums by using Stirling numbers. We also give a comment concerning the results of Petrov V.V., A generalization of the Borel-Cantelli Lemma, Statist. Probab. Lett. 67 (2004), no. 3, 233–239.

**Keywords:** Borel-Cantelli Lemma, Stirling numbers

**AMS Subject Classification:** Primary 60A10, 60F15; Secondary 05A18