RECENT PROGRESS ON SELF-NORMALIZED CRAMER TYPE MODERATE DEVIATIONS

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Abstract: The Cramér type moderate deviation quantifies accuracy of the relative error of distributional approximation and can provide a theoretical justification for the use of limiting tail probability. In this talk we shall review recent progress on Cramér type moderate deviation for self-normalized sums of independent random variables, self-normalized martingales and self-normalized quantile estimator.