VARIANCE BOUNDS: SOME OLD AND SOME NEW

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For functions of independent random variables, diverse upper and lower variance bounds are revisited. Frameworks and techniques range from jackknives to semi-groups and beyond. Specific cases involving Bernoulli, Gaussian and infinitely divisible random variables are briefly described and so are the Poisson space case. Some new applications, in particular, lower bounds on the variance of the length of the longest common subsequences in random words are presented.