The Computational Complexity of the Inverse Sort Transform

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The Burrows-Wheeler Transform (BWT) has been long known as a superior reversible text transform method based on block sorting strategy. Moreover, the Sort Transform (ST) can significantly speed up the block sorting phase of the BWT by sorting only the k-order contexts. However, the use of ST is limited by the high complexity of its inverse transform. In this talk, I would introduce our recent results of computing the inverse ST in a linear time/space complexity, i.e. a linear result independent of k.