Approaching linear ill-posed problems by an entropic projection method

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Abstract. *We propose an explicit iterative method for approximating non-negative solutions of linear ill-posed problems $Au = y$ and show that the iterates can be obtained also by minimizing functionals containing a Kullback-Leibler term.*

Moreover, we address inverse problems whose solutions are probability densities, i.e. a 'mean value 1' constraint is considered. Convergence and error estimates are obtained in both cases.