1011-90-12 **Saïd Bahi*** (bahi@suu.edu), Math and CS department, SUU, 351 Center Street, Cedar City, UT 84720. *Numerical Approximation for Nonnegative l_p-Data Fitting*

The data fitting problem by the way of computing the best approximate solution of inconsistent linear systems is a central problem in data analysis. A formulation of this problem is finding the best ℓ^p nonnegative solution of the inconsistent system $Ax = b$, where x in $\mathbf{R}^n$, A is mxn matrix and b in $\mathbf{R}^m$. We give an iterative convergent algorithm for computing the best fitting nonnegative parameters of the system.

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