Convergence rate bounds for a proximal ADMM for solving nonconvex linearly constrained problems

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In this talk, we will present some convergence rate bounds for a variant of the proximal alternating direction method of multipliers (ADMM) for solving nonconvex linearly constrained optimization problems. This variant allows an over-relaxation stepsize parameter belonging to the interval $(0, 2)$. Previous related results in the literature restrict this relaxation stepsize to the interval $]0, (1 + sqrt5)/2[$.

This is a joint work with Renato D.C. Monteiro and Max L.N Gonçalves