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THE CONVERGENT PROPERTIES OF AIMD($\alpha(T), \beta(T)$)/RED SYSTEMS

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Abstract. In this paper, we study the convergent properties of the solution of single bottleneck and multiple bottleneck AIMD $(\alpha(t), \beta(t))$ /RED systems. We first construct an auxiliary AIMD (α^*, β^*) /RED system and then compare our AIMD $(\alpha(t), \beta(t))$ /RED systems with the auxiliary system. Under some conditions, we prove that the solution of the $(\alpha(t), \beta(t))$ /RED systems converge to the equilibrium of the auxiliary AIMD (α^*, β^*) /RED system. At last, an example is give to illustrate our results.

Keywords. Convergence, Bound, AIMD$(\alpha(t), \beta(t))$/RED

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