COMPARISON OF NON-LINEAR SOLVERS FOR THE SOLUTION OF RADIATION TRANSPORT EQUATIONS[*]

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Abstract. We compare the performance of an inexact Newton-multigrid method and Full Approximation Storage multigrid when solving radiation transport equations. We also present an adaptive refinement algorithm and explore its impact on the solution of such equations.

Key words. FAS, Multigrid, Newton Method, Radiation Transport

AMS subject classifications. 35K55, 65M55, 65M60, 49M15

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