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Noureen A. Khan* (noureen.khan@unt.edu), University of North Texas Dallas, 7300 Houston School Road, Dallas, TX 75241, and **Ramanjit Sahi** and **S N Jator**. *Second derivative Adams-type methods for boundary value problems.*

“We develop and apply second derivative Adams-type methods (SDAMs) for solving linear and non linear boundary value problems. We show that this method is convergent of the order $2k + 2$ (k is the step number). Numerical examples illustrate the efficiency of the method over existing methods.” (Received September 05, 2010)