Technical Review Pat Q. Student AME 60611 25 September 2009

In their recent article, Sviercoski, $et \ al.$, ¹ describe a novel and efficient method for... The physical problem of interest is The problem has application in the fields of.... A key model equation in this study is the partial differential equation

$$\nabla \cdot (K(x)\nabla u) = 0 \quad \text{in} \quad \Omega. \tag{1}$$

In this equation x represents generalized distance, u the generalized temperature, K the generalized thermal conductivity, and Ω is the domain of interest.

The typical method of solving this problem is to.....In many cases this is deficient because.... Hence a new method is proposed which.... The method is applied to a set of test problems. It is seen that.... The authors summarize their major conclusions as follows....

The article is generally well written.... A small deficiency is seen in that... Nevertheless the strength of this paper is its clarity in.....and novelty in.....Those who are interested in problems in the related fields of.... would find this paper to be useful.

Notes

- Use the format provided here as a template; the text is entirely yours to write.
- Your review must consider a recent (t > 2005AD) and substantive article from the SIAM Journal on Applied Mathematics.
- One page maximum.
- Run your text file through a spell checker (UNIX command: *ispell filename.tex*).
- Always use complete sentences.
- Leave two spaces after a period. Leave one space after a comma.
- Give a footnote in the precise format given below. Do not be redundant with the text.
- Use commas or periods at the end of equations as appropriate.
- Do not use contractions (such as don't).
- Minimize quotations. When necessary, use matched pairs of single quotes, like this: "your quote here".
- Identify all variables with words of description.
- All mathematical variables, whether within the text or in a separate equation, should be written in math mode, e.g. "When x = 0, there is a singularity."
- English text within equations should be in text mode; use the mbox and qquad commands for this:

$$x = 1$$
 when $y = 0$.

- Do not let your review become dominated by equations.
- Avoid simplistic or trite statements such as, "The authors have pointed the way to a method from which we can all benefit."

¹Sviercoski, R. F., Winter, C. L., and Warrick, A. W., 2008, "Analytical Approximation for the Generalized Laplace Equation with Step Function Coefficient," *SIAM Journal on Applied Mathematics*, Vol. 68, No. 5, pp. 1268-1281.