



SDI Review Form 1.6

Journal Name:	British Journal of Mathematics & Computer Science
Manuscript Number:	2014_BJMCS_14727
Title of the Manuscript:	Discrete Adomian decomposition method for fuzzy convection-diffusion equation
Type of the Article	Original Research Article

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.

To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

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PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<u>Compulsory</u> REVISION comments	The paper idea is interested and well written but it needs some revision and additional definitions and improvements. In equation (1.2) the initial condition can be written $U(x, 0) = k f(x)$ where k is the fuzzy number or the fuzzy function $f(x) = kg(x)$, where k is the fuzzy number Which type of fuzzy number used in the examples triangular or trapezoidal fuzzy number. The author should define this in section 2 of refer to reference in the examples	
<u>Minor</u> REVISION comments	1- The author should give full definition about the fuzzy numbers in section 2. 2- In the introduction the author what are fuzzy differential equations, where it can be used in real life problems the approximate analytical methods used to solve it (ADM, VIM, HPM, HAM, DTM...) must write simple details about each method with type of FDE have been solved with these methods, some background also about fuzzy PDE theoretical or numerical work. 3- Convection-diffusion in fuzzy environment form must be given in section 3. In the introduction author must write (In this work, we consider the following fuzzy case of convection-diffusion equation in section 3 and apply the ADM and DADM to solve it).	



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	4- The author didn't mention the Zadeh extension principle in the fuzzification and defuzzification of convection-diffusion equation or ADM even with reference or definition. 5- The author used the inverse and integral operators, where is the definition of fuzzy integration in section 2. 6- In both examples the author must take more point (a least 5 points) of r-level sets e.g $r=0$, 0.25, 0.5, 0.75, 1. Also author must put a 2- D figures for the solution of example 1, 2 that show the methods results follow the fuzzy number properties (in the figures compare exact with analytical methods solution). 7- After you do the corrections in 6 explain more about your results the tables, figures and also in your paper conclusions. 1-Use the definition in the following reference "Solution of the first order linear fuzzy differential equations by some reliable methods", definition 2.1 properties: (i) - (iv). 5- Use definition 2.5 in the following paper "The Variational Iteration Method for Solving Fuzzy Duffing's Equation". 6-See figures 1 and 2 in "Numerical Solution of Fuzzy Differential Equations by Runge Kutta Method of Order Five".	
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<u>Optional/General</u> comments	The author needs to rewrite the introduction according to comments 2-3. I think after these comments the paper is ready to publish in the journal .	
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Reviewer Details:

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Department, University & Country	Malaysia