



SDI Review Form 1.6

Journal Name:	British Journal of Mathematics & Computer Science
Manuscript Number:	2014_BJMCS_15901
Title of the Manuscript:	Filtrations and Deductive Systems in BCL+ Algebras
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:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)



SDI Review Form 1.6

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)
Compulsory REVISION comments	This paper contains some interesting material, and in my opinion the ideas proposed in this paper are interesting for whom studies at the area of BCL algebras. So this paper is a successful work but it needs some corrections. 1. Page 3, Line 111 what is mean "subalgebra" it must be define 2. Page 3, Line113 In proof of Theorem3.3, must show that not . 3. Page 3, Line120 such that for all , then instead of such that , then . There are same problems other lines.	Thank you for your comments! Thanks for pointing out this. 1. Definition 3.4. A nonempty subset S of a BCL^+ algebra $(Y; *, 1)$ is called a subalgebra $(S; *, 1)$ of BCL^+ algebra $(Y; *, 1)$ if it is a BCL^+ algebra. For Definition 3.4, we introduce the Theorem 3.7. Theorem 3.7. Let H be a filtration of a BCL^+ algebra $(Y; *, 1)$. Then H is a subalgebra of Y. Proof. Let for all $x, y, z \in H$, by Definition 3.1(Y10) and (Y8), and by Lemma 3.3 (Y14). We have $\begin{aligned} ((x * y) * z) * ((x * z) * y) &\leq (z * y) * x \\ &\leq \mathfrak{R}(x) * \mathfrak{R}(z * y) \\ &= \mathfrak{R}(x) * \mathfrak{R}(\mathfrak{R}(y) * \mathfrak{R}(z)) \in H, \end{aligned}$ and H is filtration. By Definition 3.2 (H2), therefore, we have $\mathfrak{R}(\mathfrak{R}(y) * \mathfrak{R}(z)) \in H$, by Definition 3.2 (H3), therefore, we can write $(z * (y * x)) * x \leq \mathfrak{R}(x) * \mathfrak{R}(z * (y * x)) \in H, \text{ we have}$ $\mathfrak{R}(z * (y * x)) = \mathfrak{R}(\mathfrak{R}(y * x) * \mathfrak{R}(z)) \in H, \text{ and so } y * x \in H,$ we also have $x \in H$, then H is a subalgebra of Y.



SDI Review Form 1.6

		2. Theorem 3.3. Now Theorem 3.4. Suppose that B is a subalgebra of Y. Then B is a filtration and $x \in B$ if and only if $1 * x \in B$. Proof. If B is a filtration, then $1 * x \in B$ implies $x \in B$. Conversely, let $x \in B$ and $x * y \in B$. Since B is subalgebra, by Definition 2.3 ($BCL_{\leq}^+$ 3), we have $1 * y \leq (1 * x) * (1 * y) \leq (x * y) * x \in B.$ We see that $y \in B$, and B is a filtration. $\square$ 3....such that $0 \in \wp_j$, for all $j \in J$, then $0 \in \wp$. Let $y * x \in \wp$ and $x \in \wp$, then for all $j \in J$, we have $y * x \in \wp_j$ and $x \in \wp_j$.... Page 3, in line 89 and 96, ...for all $x \in Y$... Page 5, in line 163, ...for all $x \in Y$... Page 5, in line 177, ...for all $y, z \in Y$ Thank you again for your helpful suggestions.
Minor REVISION comments		
Optional/General comments		