

Reviewer's Comments:

This message refers to the manuscript entitled "**Filtrations and Deductive Systems in BCL+ Algebras.**"

If we let $y = z = 1$ in BCL+3, we get $((x*1)*1)*((x*1)*1) = 1*x$

so in view of BCL+1

$$1*x = 1 \quad (A)$$

If we let $x = 1$ in BCL+3, we get, by successive applications of (A) above,

$$((1*y)*z)((1*z)*y) = (z*y)*1$$

$$(1*z)(1*y) = (z*y)*1$$

$$1*1 = (z*y)*1$$

so, again in view of BCL+1,

$$\text{we get } (z*y)*1 = 1 \quad (B)$$

If, in (A) above, we set $x = z*y$, we get

$$1*(z*y) = 1 \quad (C)$$

Putting (B) and (C) together with BCL+2, we get

$$z*y = 1 \quad (D)$$

Since z and y were general elements, we can interchange them in (D) to get

$$y*z = 1 \quad (E)$$

Then BCL+2 together with (D) and (E) shows that

$$y = z \quad (F)$$

for all elements y and z of Y . Setting $z = 1$ in (F), we get the following theorem, which may be of interest to the author:

Theorem. If $(Y;*,1)$ is a BCL+ algebra, then $Y = \{1\}$.

Author's Feedback:

The author is greatly indebted to the anonymous referees for useful suggestions. For the new finding (in theorem), now be utilized to Sec.4.

4. ON REVIEWER'S (or NAMEING) THEOREM FOR BCL⁺ ALGEBRAS

In this section, we have the following theorem.

Theorem 4.1. (Reviewer, or NAMEING). If $(Y; *, 1)$ is a BCL^+ algebra, then $Y = \{1\}$.

Proof (Reviewer, or NAMEING). If we let $y = z = 1$ in $(BCL^+ 3)$, we get

$$((x * 1) * 1)((x * 1) * 1) = 1 * x,$$

so in view of $(BCL^+ 1)$,

$$(A) \quad 1 * x = 1.$$

If we let $x = 1$ in $(BCL^+ 3)$, we get, by successive applications of (A) above,

$$\begin{aligned} ((1 * y) * z) * ((1 * z) * y) &= (z * y) * 1 \\ (1 * z) * (1 * y) &= (z * y) * 1, \\ 1 * 1 &= (z * y) * 1 \end{aligned}$$

so, again in view of $(BCL^+ 1)$, we get

$$(B) \quad (z * y) * 1 = 1.$$

If, in (A) above, we set $x = z * y$, we get

$$(C) \quad 1 * (z * y) = 1.$$

Putting (B) and (C) together with $(BCL^+ 2)$, we get

$$(D) \quad z * y = 1.$$

Since z and y were general elements, we can interchange them in (D) to get

$$(E) \quad y * z = 1.$$

Then $(BCL^+ 2)$ together with (D) and (E) shows that

$$(F) \quad y = z,$$

for all elements y and z of Y . Setting $z = 1$ in (F). This completes the proof of the theorem. $\square$