

DEBATES. 1

C. Roy Keys,
Editor, "Apeiron".

Dear Editor,

I would like to record the fact that there have been twenty ~~five~~ ^{four} formal comments and replies on the B(3) field, the subject of the Spring Special Issue of "Apeiron". Comments have ranged from "very, very, very important" to "not to be taken seriously" and various forms of abuse which I, in turn, dismiss out of hand. Naturally, serious debate in "Apeiron" would be a good thing. The formal comments and replies to date are listed below. So far these involve fifteen participants. There are now six volumes and over fifty papers available on the idea. Broad agreement has been obtained on the fact that the B Cyclic Theorem is Lorentz covariant, gauge invariant, and CPT conserving. The B(3) field therefore meets all the contemporary criteria for a magnetic field, and is empirically observable wherever the conjugate product is observable. Comments are labelled (a), replies are labelled (b) and are grouped according to subject matter.

1a) L. D. Barron, Physica B, 190, 307 (1993).

2b) M. W. Evans, Physica B, 190, 310 (1993).

3a) A. Lakhtakia, Found. Phys. Lett., 8, 183 (1995).

4b) M. W. Evans, Found. Phys. Lett., 8, 187 (1995).

5a) A. Lakhtakia, Physica B, 191, 362 (1993).

6a) D. M. Grimes, Physica B, 191, 367 (1993).

7a) A. D. Buckingham and L. Parlett, Science, 264, 1748 (1994).

8a) A. D. Buckingham, Science, 266, 665 (1994).

9b) M. W. Evans, Found. Phys. Lett., 8, 563 (1995).

10a) G. L. J. A. Rikken, Opt. Lett., 20, 846 (1995).

11b) M. W. Evans, Found. Phys. Lett., 9, 61 (1996).

12a) S. J. van Enk, Found. Phys. Lett., 9, 183 (1996).

13b) M. W. Evans, Found. Phys. Lett., 9, 191 (1996).

14a) E. Comay, Chem. Phys. Lett., 261, 601 (1996).

15b) M. W. Evans and S. Jeffers, Found. Phys. Lett., 9, 587 (1996).

16a) E. Comay, Physica B, 222, 150 (1996).

17b) M. W. Evans, Found. Phys. Lett., August, 1997.

18a) E. Comay, Found. Phys. Lett., July 1997.

19 20b) M. W. Evans, Found. Phys. Lett., 10, 255 (1997).

20 21b) V. V. Dvoeglazov, Found. Phys. Lett., Aug., 1997.

21 22a) M. Y. A. Raja, W. N. Sisk, M. Youssaf and D. Allen, Appl. Phys. Lett., 67, 2123

(1995).

- 22 23a) M. Y. A. Raja, W. N. Sisk and D. Allen, Appl. Phys. B, 64, 79 (1997).
- 23 24b) M. W. Evans, Apeiron, 4, 80 (1997).
- 24 25b) M. W. Evans, submitted for publication.

The above records the fact that on several occasions, the right of reply was not forthcoming. Without the open mindedness of Prof. A. van der Merwe, censorship of the B(3) idea would have occurred, and a grossly one sided view of the subject matter presented to posterity. It is by no means clear that electrodynamics is a "finished" subject: on the contrary, it has provided one of the liveliest formal debates seen this century in physics, whether one likes the idea of B(3) or not. I cannot recall anything like this with the possible exception of the great Wimbledon match between Pancho Gonzales and Lew Hoad, which went to about sixty games in the final set, before Pancho finally won out in almost total darkness. Let us hope that some light is shed on natural philosophy as a result of all this.

Cordially Yours,
Myron Evans.

MWE