

THE UNIVERSITY OF NORTH CAROLINA
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27514

*Our pers file
under De Witt*

DEPARTMENT OF PHYSICS

April 20, 1967

Professor J.A. Wheeler
Palmer Physical Laboratory
Princeton University
Princeton, New Jersey 08540

Dear John:

I can't tell you how happy I am to have received the photocopy of your marginal notes on QFTI. Your comments are always most welcome and valuable.

I learned today that the manuscript (all three parts) has been accepted for publication. However, there are some notational modifications which Pasternack would like me to make, so he is returning the manuscript for some last minute quick changes. I shall therefore take the opportunity to incorporate as many of your suggestions as I can. It will not be possible to change whole paragraphs, but I shall change some words and occasional sentences and add references. (Can you give me the reference to Leutwyler's heuristic study of the initial value problem for the "Einstein-Schrödinger" equation? I have a copy of his preprint, but I don't know where he published it.)

The digs at the Copenhagen school were never meant to be included in the published version. Since only four copies of part I of the manuscript are in existence and since I knew you would possess one of them, I must confess I made those digs, slightly maliciously, for your benefit. I knew what your reaction would be, and I can only say "Good old John!" It always amused me to read in your Assessment of Everett's Theory (Rev. Mod. Phys. 1957) how highly you praised Bohr, when the whole purpose of the theory was to undermine the stand which he had for so long taken! (Re my use of the word "rigid" in referring to the "Copenhagen doctrine," how would you describe Rosenfeld's attitude on the subject?)

Is it wicked to confess also that my cinema universe is proposed with tongue in cheek? I knew you would object to it. I still believe the cycle has to repeat as long as I maintain the "hard wall" boundary condition at $V = 0$ ($V =$ volume of 3-space). Leakage to some other topology is the only way out as far as I can see. But I can't imagine how anything can leak through zero volume. I wish you or someone would tell me how to compute topological leakage!

PAGE TWO

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Perhaps I'll add a footnote indicating the leakage alternative. Section 10 as a whole, however, I shall leave unchanged. The more brazenly it is presented, the more likely it is to be attacked and hence yield something useful. I hope also that the irritatingly vague parts of the paper will ultimately be either clarified or junked by your students.

With my kindest thanks,

Sincerely yours,



Bryce DeWitt

BD:lt