paper[2] was received on 18 June 1947. Those experiments were intensively discussed at the famous Shelter Island theoretical conference held in June 1947, with most attention being devoted to the Lamb–Retherford experiment, which gave a much bigger anomaly and was more easily explained. Hendrick Kramers and others argued that radiative corrections to the energy of an electron in a Coulomb field could produce a shift in the energy levels of hydrogen, and that it might be possible to calculate such an effect approximately, despite the infinities that plagued most radiative correction calculations. Hans Bethe, in an article received on 27 June 1947,[3] published a nonrelativistic field theory calculation that accounted for most of the observed Lamb shift. The first theoretical publication to discuss the experimental hyperfine structure anomaly[4] was received from Gregory Breit on 29 September 1947. However, Breit merely suggested that the experiment was consistent with the electron's having a magnetic moment different from the Dirac value; he made no effort to provide a QED explanation. Schwinger's great renormalized field theory,[5] which accounted for both the hyperfine and fine structure anomalies, was received 30 December 1947, seven months after the experiments were reported.

Surely the Nafe, Nelson, and Rabi hyperfine structure experiment was not invented to verify the renormalized electrodynamics, since it was invented by Rabi and me in late 1944. We gave it highest priority because we and others had measured the proton magnetic moment, the electron magnetic moment was given by the Dirac theory, and the electron wavefunction in hydrogen was known. Therefore, the hyperfine separation could be calculated, and the experiment would provide a fundamental test of the Dirac theory. We never mentioned QED, with or without renormalization.

My second experience relating to the sequence of experiment and theory occurred in the summer of 1947 when I visited Cambridge, Massachusetts. Schwinger invited me to lunch and asked me searching questions about the reliability of the experimental hyperfine anomaly. He said he thought he could explain it, but would have to develop a relativistic QED; he was worried about doing all that work if the hyperfine anomaly wasn't real. I told him I was convinced it was real. He then worked vigorously on this problem, and the following December submitted his paper that correctly accounted for both hyperfine and fine structure experimental anomalies as being due to radiative corrections that could be calculated in his theory, using both mass and charge renormalization.

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WOLFENSTEIN REPLIES: Norman Ramsey's account of his conversation with Julian Schwinger is a very valuable historical item indicating how a theoretical calculation was motivated by an experimental result. It is worth noting, however, that the experiment of Willis Lamb was motivated, at least in part, by the belief that there should be higher-order corrections to the hydrogen spectrum, a subject much discussed in the Oppenheimer group with which Lamb worked in the 1930s.

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No-Shows Spoil Meeting Sessions

This is a letter to the physics community to solicit suggestions for addressing a serious problem: the disruption of meeting sessions by speakers who fail to show up as scheduled and who do not notify meeting organizers or session chairs in advance of their absence.

Generally, if a speaker fails to show, the chair will adjourn the session for an appropriate amount of time so that succeeding talks can proceed as scheduled. In that way, meeting participants who would like to hear a particular talk, but not necessarily sit through the entire session, will know when to arrive. That, after all, is the principal purpose of publishing a roster of talks in advance.

But what is a chair to do when faced with multiple absences?

As a speaker at a recent meeting, I arrived about 40 minutes in advance of my scheduled time to find that, following conclusion of the talk in progress, the chair terminated the session. Faced with no-shows, the chair, rather than risk losing the audience by temporarily adjourning the session, had called the names of speakers in order. Anyone not then present was deemed a "missing speaker," even though his or her name may have been called far in advance of the published time. Fortunately, the session was called to order again before attendees left, and I presented my talk, but those who came to hear the talk at the scheduled time found the session closed.

Sessions that involve speculative aspects of quantum theory, relativity, and cosmology are especially susceptible to this kind of disruption. Such sessions seem to attract contributions that many physicists might consider "not even wrong," to use Wolfgang Pauli's critical remark. The authors, who have no intention of actually presenting their work, submit abstracts that serve as self-promotion, rather than as a statement of recent work to be presented at the meeting. By submitting abstracts of talks that they do not intend to give and defend publicly, such authors manifest a lack of integrity, thwart the purpose of the meeting as a venue for the free exchange of ideas, and disrupt sessions for serious scientists who have come to speak and to listen.

One way to discourage such submissions is for meeting organizers to do what hotels routinely do: require a credit card number at the time of abstract submission. Authors who then do not show up at their sessions and have not notified the appropriate official prior to publication of the program would be charged a certain amount—for example, the registration fee plus a penalty. When it becomes costly to be the author of an abstract for a "fake" presentation, fewer such abstracts will be published and fewer sessions disrupted.

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Correction

July 2001, page 20—YAG stands for yttrium aluminum garnet, not ytterbium aluminum garnet. ■