

FORUM

The Debate on Protons and Electrons in Solar Flares

PAGE 155

The series of articles in *Eos* (September 10, 1996) on particles in solar flares caught my eye. As I am not directly working in, but certainly am interested in, the field of particle acceleration in solar flares, I expected

comprehensive, easy to understand summaries of two conflicting points of view I had read about before. The introduction by Peter Cargill set the stage perfectly for such a discussion.

Too bad the debate did not fulfill my expectations. It became very clear as I read the articles that [the authors of the debate] were not dealing with the subject on an equal basis. Clearly, the article by George M. Simnett about protons had been written without prior insight into the opposing view. Unfortunately, the case for the electrons by A.

Gordon Emslie was basically a reply to the proton case, sometimes specifically citing parts of the article. This would have been appropriate if Simnett had had the chance to reply, but unfortunately no such reply was added to the series.

I strongly encourage the presentation of such debates in *Eos* because it is very interesting and useful to weigh the evidence of opposing views. Such debates should present the points of view on an equal basis, though. This clearly did not happen in this case, and the articles left the reader with the impression that there is an unsettled debate in space physics which should be presented in a more fair and symmetrical way.—*Thomas H. Zurbuchen, Department of Atmospheric, Oceanic and Space Sciences, University of Michigan, Ann Arbor*

Reply

PAGE 155

Although I explained the revision/review process for these "Great Debates" privately to Dr. Zurbuchen, this letter provides an opportunity to clarify such issues for other *Eos* readers.

In each of these debates, the participating authors for the introductory "pro" and "con" articles submit their typescripts to the AGU/*Eos* office in Washington. The *Eos* editorial staff sends editorial comments and the initial typescripts to me for review. I then send the typescripts as a set to four or more disci-

pline scientists. When all of the reviews are in, I send the typescripts and these (anonymous) reviews to all of the authors. They revise their typescripts as they see fit in response to both the reviewers' comments and in view of the other articles in the set. When these are returned, I ordinarily accept them and forward them to *Eos* for fine-tuning and publication.

In the case of the specific debate set discussed here, there were several opportunities for Simnett to revise his typescript in view of the Emslie and Cargill pieces. All three of these authors openly shared their progressive versions of the typescripts before submission to *Eos* and during the reviewing/revision

process. Emslie chose to revise his article and transform it into a direct response to Simnett's piece. Simnett chose to state his position in a more free-standing format, even though he saw Emslie's article at least twice. As editor, I avoided deciding or even suggesting to either author which direction might be more effective or more desirable. I feel that this philosophy should be the debater/author's free choice.

I thank T. Zurbuchen for providing an opportunity to clarify somewhat the review/revision process that I use for these debate articles, and I would also like to take this opportunity to solicit new Great Debates for Space Physics.—*J. L. Horwitz, Eos SPA Editor*