LETTERS TO THE EDITOR

Letters are selected for their expected interest for our readers. Some letters are sent to reviewers for advice; some are accepted or declined by the editor without review. Letters must be brief and may be edited, subject to the author's approval of significant changes. Although some comments on published articles and notes may be appropriate as letters, most such comments are reviewed according to a special procedure and appear, if accepted, in the Notes and Discussions section. (See the ''Statement of Editorial Policy'' in the January issue.) Running controversies among letter writers will not be published.

SOLAR BLACKBODY SPECTRUM AND THE EYE'S SENSITIVITY

Virginia Trimble's wonderful article on cosmology (December 2002, pp. 1175–1183) states that ''any blackbody source at a temperature near that of the sun...is bound to look white. This is not a coincidence, but a product of evolution; our eyes are most sensitive at the peak of the solar spectrum.'' I had believed this for years, until I read Bernard Soffer and David Lynch's article in AJP, November 1999, pp. 946–953. They show that the quoted statement is misleading and erroneous, because the spectral radiance versus wavelength graph is a density distribution function whose peak position changes when plotted in terms of a different variable such as frequency, while the eye's sensitivity is an ordinary function. Furthermore, ''the eye does not appear to be optimized for detection of the available sunlight. ...It is likely that we are viewing the world with a souvenir of the human evolutionary voyage.''

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AUTHOR'S RESPONSE

Professor Hobson is, of course, right about the details of this issue. But what I (and many others) have always meant by the broad remark is that there are good reasons that we do not have eyes that are primarily sensitive to far IR, UV, mm, radio, or x-ray emission. Although astronomers sometimes speak of the sun as belonging to a category of ''yellow'' stars, people who measure color for a living (for example, my father was a chemist specializing in color-forming materials) define ''white'' as the appearance of things like clean paper in full, clear sunlight.

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GATEWAYS INTO ELECTRONICS

In the review of my book, *Gateways into Electronics*,[1] that appeared in the May 2001 issue of AJP,[2] the reviewer ponders at length about its suitability for his students at UC, Berkeley and decides that *Gateways* is not for them. This choice is of course his prerogative. He does, however, make a statement to which I would like to respond, namely, that *Gateways* is not suitable for an introductory course.

As I wrote in the Preface, the chapters in *Gateways* are of two distinct types: elementary chapters that deal with standard topics such as circuit theory and transistor amplifiers, and more advanced chapters that provide the mathematical and physical underpinning for the elementary chapters or deal with complementary topics such as transmission lines and signal recovery. For example, Chapter 1 discusses simple linear systems to the extent required in subsequent elementary chapters and involves only complex numbers and linear differential equations, whereas Chapter 2 is a full-blown exposition of generalized functions and integral transforms that leads to the convolution theorem for linear systems and Shannon's sampling theorem. Chapter 2 is intended for those who might eventually find it of interest, but in a first reading, or if only an introductory treatment is desired, it can be skipped or postponed with no loss of continuity.

Gateways has its origins in an introductory course for students straight out of high school, so that although it is true that the text has become more mathematical and now has juniors in physics preferably in mind, its thrust has not changed and the elementary chapters remain, as they were at the outset, quite accessible to beginners.

[1]Peter C. Dunn, *Gateways into Electronics* (Wiley, New York, 2000). A brief description and a table of contents are available at ⟨www.amazon.com⟩.
[2]Joel Fajans, review of Ref. 1, Am. J. Phys. **69**, 621 (2001).

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