Editor's choice

This is my last opportunity to use this page (or pages!), and I intend to take full advantage of it. Not, however, by once more giving you my thoughts about physics nor my advice on how to teach it. For the former, I can refer you to my first editorial [“The joy of physics,” 56 (7), 585 (1988)], very little of which I would choose to revise. For the latter, I will mention the paper I published here in 1993: “Reading the equations and confronting the phenomena—The delights and dilemmas of physics teaching,” 61 (2), 128–142 (1993). And if any reader wants to know how much I have enjoyed being the editor of this journal for the past thirteen years, take a look at the editorial I wrote at the time we began the search for my successor: “Why not be editor?,” 68 (3), 209 (2000). I will just quote here the final sentences of that editorial:

The editorship of AJP is a wonderful job. For me it has been the most important, difficult, and rewarding professional responsibility I have ever had. I am grateful for the privilege of having had primary editorial responsibility for this uniquely important physics journal.

As I reread that editorial, I wonder how anyone could be so foolish as to retire from the editorship of this wonderful journal. But I now pass on this responsibility with complete confidence to the new editor, Jan Tobochnik of Kalamazoo College. I look forward to my role as an avid reader and a subscriber, continuing my subscription which has been unbroken since 1952. When this issue arrives in my mailbox, it will be my 565th copy of AJP; I anticipate many more.

It would be impossible to thank by name all the authors, referees, and critical readers around the world who have contributed so importantly to the success of the American Journal of Physics and all those at the American Institute of Physics and the American Association of Physics Teachers who play such important roles. I single out for special mention all the members of my family who have encouraged and supported me and who have managed to understand my passion for AJP and those who have worked with me in the editorial office, especially Karla Keyes and Rob Oldershaw (who have been with me ever since 1988), and Kannan Jagannathan (who has been officially with me for most of that time and before that a valued colleague down the hall). K2, Rob, Jagu: It has truly been a pleasure to work with you. Thanks, for your dedication and your friendship!

What I want to do in this final editorial is to list my own AJP favorites from the time of my editorship. Some of these, though officially accepted by me, will not appear in print for another few months—and because of the publishing schedule, I had to restrict the selection to papers accepted by mid-April, 2001. Here are papers that I especially enjoyed working on and shepherding through the sometimes laborious and apparently interminable process of reviewing, revising, reviewing.... Some of these are papers on which little editorial effort was needed but which I simply enjoyed reading and from which I learned some interesting new physics. I have included a few of my own editorials that I enjoyed writing and was happy to see in print and have even included half a dozen of my favorite “Page Fillers” from among the 1200 or so that we have printed since we renewed this custom shortly after the editorial office moved to Amherst College. It would be tempting simply to list everything published since 1988, and of course I know that by omission I may be causing some authors to wonder why their papers are not here. But these are my personal choices, and I am now doing for the last time one of the many things that a good editor is supposed to do—make choices. I hope this list may remind you of some papers you may have overlooked or of papers you may want to reread. I myself found it hard to put this list together; I kept coming across papers, many of which I had read and worked on in quite a few versions before they were printed, that I wanted to read again.

The order is approximately chronological, but when one item inspired others or when several papers form a sequence, I have tried to group all items together with the initial one. Neuenschwander’s innocent Question [“The spin-statistics theorem,” 62 (11), 972 (1994)], for instance, asking whether anyone had yet met Feynman’s challenge to find an “elementary explanation” of the spin-statistics theorem (or, as it might be more properly referred to, the “spin-statistics connection”), led to a number of non-answers, another answer (by Hilborn) explaining why those “answers” were not satisfactory, and then a long paper by Duck and Sudarshan, as well as a review by Wightman of Duck and Sudarshan’s book on the subject. All of this is interesting physics of the most basic sort, but unfortunately, the answer to Neuenschwander’s original Question is still negative. As another example, Pellegrini and Swift’s 1995 paper [“Maxwell’s equations in a rotating medium: Is there a problem?,” 63 (8), 694–705 (1995)] led to a number of other theoretical papers (and to a significant number of submissions that missed the point) and finally to an experimental paper (“Measurement of the relativistic potential difference across a rotating magnetic dielectric cylinder,” based on a succession of three Amherst College undergraduate theses), by J. B. Hertzberg, S. R. Bickman, M. T. Hummon, D. Krause, Jr., S. K. Peck, and L. R. Hunter (in this issue), with data allowing one to draw a distinction between two rival predictions. Thank you all once more for the opportunity to serve as editor of my favorite physics journal for these last thirteen years.


1988

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gramming and student life at Douglass College,” 59 (12),
1065 (1991); Kenneth S. Krane, “Women in physics—A
male department chair’s perspective,” 61 (5), 393–394
(1993); Elaine Seymour, “Why undergraduates leave the
sciences,” 63 (3), 199–202 (1995); Jan M. Garrison-Rice,
“On the problem of making science attractive for women
and minorities: An annotated bibliography,” 63 (3), 203–
Harold S. Zapolsky, “On electric fields produced by steady

1989
Martin Gardner, “Is realism a dirty word?,” 57 (3), 203
(1989).
Carl Sagan, “Why scientists should popularize science,” 57
Wayne A. Bowers, “Still more on the Coulomb potential,”
Michael Martin Nieto, Richard J. Hughes, and T. Goldman,
“Actually, Einstein did publish his results in 1910, it’s just
that no one knows about it...,” 57 (5), 397–404 (1989).
Robert H. Romer, “Spin-1/2 quantum mechanics—Not in
my introductory course!,” 57 (6), 491 (1989).
Robert N. Little, “American Association of Physics Teach-
ers 1971 Oersted Medalist: Richard P. Feynman,” 57 (6),
492 (1989).
Alfred Shapere and Frank Wilczek, “Gauge kinematics of
Thomas E. Phipps, Jr., “Relativity and aberration,” 57 (6),
Melba Phillips, “Are there lessons from history?,” 57 (7),
W. Zimmermann, Jr., “A wave-packet description of the
motion of a charged particle in a uniform magnetic field,”
57 (7), 593–598 (1989). See also Comment by R. A. Moore,
Richard E. Berg and Michael R. Collier, “The Feynman in-
verse sprinkler problem: A demonstration and quantitaive
analysis,” 57 (7), 654–657 (1989). See also Michael R. Col-
inverse sprinkler problem: A detailed kinematic study,”
59 (4), 349–355 (1991); E. Rune Lindgren, “The transport of
J. M. Pasachoff, “La vitesse de la lumiere or honoring
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Eric R. Scerri, “Eastern mysticism and the alleged parallels
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Rodney C. Cross, “Magnetic lines of force and rubber
Ray Skinner and John A. Weil, “An introduction to gen-
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S. P. Bouhni, “The case of the identically accelerated
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A. P. French, J. M. Potgieter, and Jean Sivardiere, “Comment
on ‘Coriolis deflection and air resistance,’ by J. Sivardiere
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Hans A. Bethe, “Review of The Privilege of Being a Physi-
Christian Janot, Jean-Marie Dubois, and Marc de Boissieu,
“Quasiperiodic structures: Another type of long-range order
J. L. Heilbron, “The politics of the meter stick,” 57 (11),
Helge Kragh, “The negative proton: Its earliest history,” 57
M. Torres, J. M. González, and G. Pastor, “Comment on
‘Relation between charge density and curvature of surface of
charged conductor,’ by Kun-Mu Liu [Am. J. Phys. 55 (9),
849–852 (1987)],” 57 (11), 1044–1046 (1989), and a Com-
ment on the same paper by Myriam Dubé, Mario Morel, N.
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(1991); I. M. Benn and S. T. Shanahan, “Of lightning rods,
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Nicole Meyer-Vernet, “Nonradiating sources: The subtle art
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and forces of contact,” 57 (12), 1089–1098 (1989).
Edward A. Desloge, “Nonequivalence of a uniformly accel-
erating reference frame and a frame at rest in a uniform
demonstration of superconductivity in YBa2Cu3O7,” 57
Helmut Schmidt, “A simple derivation of distribution func-
tions for Bose and Fermi statistics,” 57 (12), 1150–1151
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Robert J. Birgeneau, “Novel magnetic phenomena and high-
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1993


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1996


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Jon H. Eggert, “One-dimensional lattice dynamics with pe-
riodic boundary conditions: An analog demonstration,” 65

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Chad D. Whipple, “Optical Doppler measurements,” 65

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Teaching?—Thoughts about Edward M. Purcell,” 65 (8),
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timal angle of projection in general media,” 65 (8), 797–799
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Bright to travel backward in time?,” 66 (3), 179–185

Martin Ligare, “Numerical analysis of Bose–Einstein con-
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Diversity and the structure of physics,” 66 (6), 468–482

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2000


2001


D. N. Moothoo, J. Arlt, R. S. Conroy, F. Akerboom, A. Voit,

The following papers will appear sometime during 2001. At the time this list was compiled, they had been officially accepted for publication but had not yet been scheduled.

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**ONLY THE TENTH MIND**

The lecture system to classes of hundreds, which was very much that of the twelfth century, suited Adams not at all. Barred from philosophy and bored by facts, he wanted to teach his students something not wholly useless. The number of students whose minds were of an order above the average was, in his experience, barely one in ten; the rest could not be much stimulated by any inducements a teacher could suggest. All were respectable, and in seven years of contact, Adams never had cause to complain of one; but nine minds in ten take polish passively, like a hard surface; only the tenth sensibly reacts.