Editorial: Physics - spotlighting exceptional research

Just 50 years ago, the American Physical Society embarked on a new adventure. Submissions of high-quality research papers had been growing relentlessly, and physicists continued their postwar productivity with healthy increases in exciting new results. The APS felt that the time was right for a new journal, a publication that would feature short reports of exciting new work and foster interactions among physicists in related fields. In his first editorial at the helm of the brand-new *Physical Review Letters* (PRL), Sam Goudsmit wrote that the journal should contain "about 15 papers," and these would only be accepted "if they contain important new discoveries or cover topics of high current interest in rapidly changing fields of research." Goudsmit anticipated that the journal would become very popular with authors, and it did. PRL was a roaring success, and published many of the most important papers in physics.

This success has come at a price. PRL continues to publish many important papers, but it must also confront the incredible surge in the number of submissions and published papers. PRL has grown fivefold from the original 15 papers per week, and the combined output of all of our peer-reviewed publications is now about 18,000 papers a year. This embarrassment of riches is an obvious problem for physicists who want to track their own fields, not to mention interesting developments in allied areas that could catalyze new interdisciplinary work. And we know that lurking within the merely excellent body of peer-reviewed papers published annually by APS are some truly exceptional papers. How can we most effectively bring the best in all of the *Physical Review* journals to the wider notice of working physicists?

This month, APS is taking another step on the journey with the formal debut of an online publication called *Physics* [http://physics.aps.org/]. Available in beta form since July, this new venture offers expert-written commentary articles that highlight and provide context for a select group of papers published by APS and occasionally others. "Viewpoints" discuss and explain a particular paper's findings in a manner accessible to all physicists, especially to those outside a narrow subspecialty. "Trends" are longer pieces that cover a recent body of work in a specific field, but also look ahead to the challenges and questions that fascinate that field's top researchers. "Synopses" are staff-written summaries of papers that merit wider attention among physicists in all fields. Your feedback and suggestions by email to physics@aps.org are welcome.

Since July, we have already published in *Physics* 18 Viewpoints, 2 Trends, and over 25 Synopses. The quality of these articles, and the articles that they target, is outstanding, and the comments we have been getting indicate that *Physics* is just what many busy physicists have wanted to keep up on new developments in physics.

We expect that these commentaries on the best peer-reviewed research published by APS will complement existing coverage of physics in *Physical Review Focus*, *Physics Today*, Physics News Update, and other venues. In future issues, we hope to introduce new features and new ways of highlighting the latest research. Most of all, we will strive to ensure that *Physics* spotlights the best in physics as we journey toward another 50-year anniversary.



http://physics.aps.org/

Published 15 September 2008 DOI: 10.1103/PhysRevB.78.090001

PACS number(s): 01.30.-y

Gene D. Sprouse Editor-in-Chief American Physical Society