

## Editorial

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Dear Readers, Friends and Colleagues:

After almost 14 years of service as Editor-in-Chief of *Annalen der Physik*, this issue, the last one under my responsibility, is a good occasion to look back to the early days of my engagement for the *Annalen*, and to recall a few highlights.

The first e-mail in my *Annalen* folder is dated 3 December 1997. In a circular to about 50 theoretical physicists in Germany, Bernhard Mühlischlegel, at the time Chief Editor, not only informed us about the dramatic decrease of submitted manuscripts, but also of the fact that he would resign by the end of the year. He posed two questions: would you regret the *Annalen* being abandoned? And, if “yes”, would you be willing to get involved in a potentially larger editorial board? At that time the *Annalen* was published by J. A. Barth – *Annalen's* long-time publisher which had been acquired by the Hüthig Publishing Company in Heidelberg a few years earlier. About half a dozen colleagues responded positively and we met in Heidelberg on the 19th – and partly on the 20th – of February 1998. Participants in this meeting were Friedrich Hehl, Claus Kiefer, Bernhard Kramer, Bernhard Mühlischlegel, Ingo Peschel and myself on the one hand, and Mrs. Matthies, Dr. Muth and Mr. Witych, representing Hüthig, on the other. To fully appreciate the dramatic situation, I should mention that numerous discussions with representatives of the German Physical Society (DPG) in the preceding months had not opened new perspectives for the *Annalen*. In fact the involvement of the DPG – which had persisted for more than 100 years (“Herausgegeben unter Mitwirkung der Deutschen Physikalischen Gesellschaft”) – ended with the last issue in 1998. Since I was not directly involved in these discussions, I will refrain from elaborating on this particular aspect any further.

Another meeting was convened on the 27th of March 1998 in Regensburg, and the new editorial board was formed (Eckern, Fredenhagen, Hehl, Kramer, Röpke). The next steps were: the formulation of an editorial policy, see below; the establishment of an Advisory Board; the publication of issue 2 of this year, the first one under our editorship (in June or July – as far as I can recall); and the sale of the *Annalen* to Wiley-VCH (I received this information on 2 June; Wiley-VCH has been the *Annalen's* publisher since issue 3/1998).

Our editorial policy, formulated in 1998, has been effective until today:

“*Annalen der Physik* – one of the world’s oldest journals for physics – continues to publish high quality articles on topics in experimental, theoretical, applied, and mathematical physics and related areas. As readers are from all disciplines in physics, authors are requested to adjust their presentation accordingly. In original papers a tutorial introduction should be given, explaining carefully the context of the work, as well as a similarly organized conclusion.

In particular, the editors would like to attract review articles. Articles in style and size between an original paper and a review are also welcome. In principle, there is no length limitation, though an article length of about 40 pages (as printed) should be exceeded only in special cases. (Original papers should be shorter.) Exceptional dissertation and habilitation theses, usually after revision, will be considered.”

Fortunately, in 1998 we were able to acquire two Special Topic Issues, devoted to “Percolation, Interaction, Localization: Simulations of Transport in Disordered Systems” and “Superluminal(?) Velocities”,

with Michael Schreiber, and Peter Mittelstaedt and Günter Nimtz, as guest editors, respectively. Further noteworthy Special Topic Issues followed: “Journées Relativistes 99” (G. Neugebauer, R. Collier) and “Nonlinear Dynamics and Fluctuations in Classical and Quantum Systems” (G.-L. Ingold, S. Linz, P. Reimann) in 2000; “Quantum Theory Centenary” (C. Thomsen) in 2000 and 2001; “Nonlinear Structures in Dissipative Systems” (R. Friedrich, T. Kuhn, S. Linz) and “New Developments in Hadron Spectroscopy and Reactions” (M. V. Polyakov, P. Schweitzer) in 2004; “Commemorating Albert Einstein” (U. Eckern, F. W. Hehl) and an issue honoring B. Mühlischlegel on the occasion of his 80th birthday (U. Eckern, I. Peschel) in 2005; “Gravitation and Theory of Relativity” (J. Frauendiener), “Fundamental Cosmology” (M. P. Dabrowski) and “Commemorating Paul Drude” (M. Dressel) in 2006; “Quantum Noise, Fluctuations, and Full Counting Statistics” (G.-L. Ingold, R. Egger) in 2007; “Commemorating Max Planck” (U. Eckern) and “The Minkowski spacetime of special relativity theory – 100 years after its discovery” (F. W. Hehl) in 2008; “Optical and Vibrational Spectroscopies” (A. H. Romero, J. Serrano) and “Electronic Correlations in Models and Materials” (P. van Dongen, M. Kollar, T. Pruschke) in 2011.

In addition, we were able to publish several remarkable original papers and reviews – too many to mention all of them here. Recent highly cited papers are: “Flow equations for Hamiltonians” (by F. Wegner, AdP **506**, 77 (1994)), “Brownian motors” (by P. Hänggi, F. Marchesoni, and F. Nori, AdP **517**, 51 (2005)), “Bosonization for beginners – refermionization for experts” (by J. von Delft and H. Schoeller, AdP **510**, 225 (1998)), “The metal-insulator transitions of VO<sub>2</sub>: a band theoretical approach” (by V. Eyert, AdP **514**, 650 (2002)), and “The first second of the Universe” (by D. J. Schwarz, AdP **515**, 220 (2003)). For details, see my *Annalen* Homepage Augsburg, <http://www.physik.uni-augsburg.de/annalen/>. With Theodor W. Hänsch’s Nobel lecture, “Passion for precision”, a new highlight was introduced in 2006, namely the Einstein Lecture series: this series features outstanding articles by extraordinary scientists. I am proud to announce that in the January 2012 issue, Dieter Vollhardt, who received the Max Planck Medal in 2010, will present an Einstein Lecture on “Dynamical mean-field theory for correlated electrons”.

In view of the grand history of *Annalen der Physik*, we occasionally published English translations of important articles which were written several decades ago in German – see also my Editorial in issue 7–8/2009 –, as well as historical papers featuring the life and the work of outstanding physicists such as Planck, Einstein, Drude, Kaluza, and Majorana. In particular, Planck’s role as Editor in Chief of the *Annalen* is discussed in “Physical sense in relativity: Max Planck edits the *Annalen der Physik*, 1906–1918”, by Lewis Pyenson (issue 2–3/2008), and “Max Planck as Editor of the *Annalen der Physik*”, by Dieter Hoffmann (issue 5/2008). In connection with the translation of historic papers – and on numerous other occasions – the help of my long-time secretary, Colleen Wunsch, a native English speaker, was indispensable. I always enjoyed discussing with her the subtleties of ‘good’ (British or American) English, and I benefitted very much from her critical comments.

Several colleagues from all over the world have been very supportive in recent years. It was heart-warming to realize that for many physicists *Annalen der Physik* is not only ‘some other journal in physics’; instead, it is appreciated by many that the journal has been deeply intertwined with major developments in physics (and partly in chemistry) for more than two centuries – an attitude which extends beyond statistics, impact factors and the like.

Of course, many people have contributed to the *Annalen*’s recent success. First of all, I am most grateful to my editor colleagues Klaus Fredenhagen (until 2004), Friedrich Hehl, Bernhard Kramer, Gerd Röpke, and Andreas Wipf (from 2005), for their support and indispensable assistance. (I should perhaps remind you here that in 1998, when I agreed to become Editor-in-Chief, it was agreed that this responsibility should be passed to someone else every two years!). Second, the support from the Advisory Board is greatly appreciated, as well as from our several guest editors – and, in particular, from our authors.

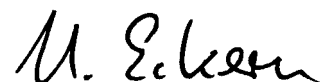
14 years is a pretty long time span. At the beginning, papers were submitted mostly in hardcopy form. The first *Annalen* T<sub>E</sub>X templates were created by Michael Schreiber and his student Cristine Villagonzalo in 1999. Wiley established the first online submission service in 2003, which was replaced recently, in January 2010, by a modern electronic system, namely ScholarOneManuscripts. In 1998, about 40 papers (not counting the proceedings issues 5–6 and 7–8) were submitted to the *Annalen* – in 2011, there have

been more than 300 submissions. In 1998, eight issues were published with about 800 pages in the old (small) format, in 2011 there are 12 issues with about 1050 pages in the new format; this is an increase of close to 50 percent. Of course, the annual prize also increased, from 704 DEM in 1998 (print only) to 1136 EUR in 2011 (print and electronic copy).

Several Wiley staff members have been involved with the *Annalen*, in one way or the other, and I sincerely thank all of them for their supportive attitude at all times: Dr. Michael Bär, Cornelia Wanka, Dr. Eva Wille, Dr. Peter Gregory, André Danelius, Dr. Alexander Grossmann, Dr. Jörn Ritterbusch, and Dr. Guido Fuchs. (Roughly in chronological order, to the best of my recollection.) In particular, André Danelius and Cornelia Wanka competently managed all technical details between the acceptance of manuscripts and the delivery of the print version. Last but not least, Katharina Steingraeber and her team expertly solved all  $\text{\TeX}$  questions.

From January 2012 I will hand over my responsibilities to Guido Fuchs – with both sadness and gladness. Guido previously – since April 2009 – served as Managing Editor for the *Annalen*. In fact he has been most active during recent months preparing the new era of the *Annalen* which starts with the next issue. For example, he created an impressive ‘sample issue’, available on Wiley’s relaunch site, <http://www.ann-phys.org/Relaunch2012/>: in particular, the ‘sample issue’ features Guido’s informative article “Annalen der Physik – a brief history of a living legend”. I wish him every possible success – and I hope our authors and readers will continue to support him and the *Annalen* in the years to come.

With my best wishes



Ulrich Eckern  
Editor-in-Chief (1998–2011)