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SPEKTRUM – The International Amateur-Professional Journal for Astronomical Spectroscopy

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For about 25 years the Spectroscopy Section of the German Amateur Association (VdS) has published the free SPECTRUM journal. It addresses amateur and professional astronomers who work with spectroscopic techniques.

In the international astronomy scene there are just a few journals that cover scientific work and results of both amateur and professional astronomers. This is due to the small working overlap in the two communities but also probably due to the few working fields in which amateurs can provide significant

scientific contributions. One of these few fields is spectroscopy. At first glance, this seems surprising because spectroscopy is the work horse for many areas in science. Without spectroscopic measurements we would understand neither how our sun works nor the structure of the universe. In short: A true

understanding of our world would be impossible.

Collaboration between amateurs and professionals

Professional astronomy has used spectroscopic techniques for more than 100 years. Amateurs, though, began doing spectroscopy only about 25 years ago with modest attempts. After several years in start-up phase the technology has been so established that even amateurs can work with homemade or purchased systems. Only in the last few years projects and observation campaigns in cooperation with professional astronomy have been performed. This was accompanied by newly available off-the-shelf spectrographs, significantly lower equipment prices and a dramatic growth of knowledge and experience in various amateur groups. This is reflected by a large number of new results and corresponding publications. More and more amateurs can be found in author lists of professional refereed articles including spectroscopic data and results.

Adequately publishing results

Exact analytical work requires professional methods. This is not only valid for data acquisition, reduction and interpretation but also for a resulting publication. The German VdS SPECTROSCOPY section follows precisely this approach. The bilingual (English/German)

spectroscopy journal **SPEKTRUM** - **Mitteilungsblatt der Fachgruppe Spektroskopie in der Vereinigung der Sternfreunde e.V.** published by the German VdS amateur spectroscopy section is the only refereed European amateur journal which includes articles by amateur AND professional spectroscopists. Independent and anonymous referees, invited by the journal editor evaluate the submitted articles and discuss with the author(s) to improve their articles for best impact and readability. Of course, the assessment standards are somewhat relaxed compared to purely professional journals. To that extent, this process emphasizes the growth of knowledge and improved text. The goal is always to promote the working joy by a critical and profitable dialogue to everyone's benefit. An article published in the SPEKTRUM journal has a basic quality that attracts the attention of the reader, but also motivates other potential authors to write their own articles. By steadily improving the working quality, articles are improved and everybody (authors and readers) can benefit - and incidentally professionals become more aware of amateur work. As a visible result scientists regularly visit our annual spectroscopy conferences. There are 12 articles from professionals in the last 10 editions of our magazine alone! Incidentally, our journal has an "International Standard Serial Number" (ISSN) for periodicals to ensure an appropriate reference.

SPEKTRUM covers all aspects of spectroscopy, such as measurements from the sun to quasars, data reduction, interpretation, instrumental design, opto-mechanical theory and physics. It also includes conference proceedings and quite exotic applications, such as, the isotopic ratio of Europium in the sun or X-ray fluorescence spectroscopy of meteorite material - all this, of course, in color. Thus, our journal is not only an important information source (besides our discussion forum) but also acts as an inspiration for other work. Last but not least, it is a documentation of the progress in international astronomical amateur spectroscopy. Motto: It is never complete until you write it down.

Almost all issues of SPEKTRUM since the early 1990s can be found at the web portal of the VdS SPECTROSCOPY section (http://spektroskopie.fg-vds.de/index_e.htm → "Our Journal"). From a historical perspective not only is the constantly growing number of authors noteworthy but also the significant improvement of the content quality in the last 5 years. All editions of this oldest journal of amateur spectroscopy (25 years continuously published) are available as PDF documents and can be downloaded for free. Our current editor is Dr. Thomas Hunger. He previews all submitted articles, forwards them to the referees and coordinates the referee-author dialogue. All accepted articles are brought to a uniform and easy to read two-

column column format and are then sent to the respective authors for final examination before publication. Articles can be published in English so that an international visibility is granted.

Our section is particularly active in supporting young talents. This is achieved by monitoring specific projects or by providing financial support for attending our conferences. This also applies to the publication of articles. Unlike other periodicals we always offer help in getting articles published. Thus, dealing with peer-reviewed publications can be practiced at an early stage in one's "career". This might also help for other disciplines. Everybody who wants to carry out relevant work, publish new ideas on the subject and would like to start an international discussion is in good hands with our journal. We welcome all submitted work, especially in English to support international collaboration. Hence, we want to motivate colleagues and in particular newcomers to publish their articles in SPEKTRUM.

Thomas Eversberg was educated as a professional astronomer, co-founded the Schnörringen Telescope Science Institute in Germany (www.stsci.de), and in his day job now works for the German Space Agency in Bonn.