

Preface to the Proceedings of Quantum Structures 2002

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The international conference Quantum Structures 2002 (QS2002) was held in the city of Vienna from July 1st to 7th, 2002 in the framework of the (IQSA). The University of Technology Vienna served as local co-organizer and sponsor, accompanied by the City of Vienna and the Vienna Tourist Board.

Summer was in full swing and floated into the lecture halls adjacent to the Musikverein, home of the Vienna Philharmonic Orchestra. As it happened, there also were occasional showers and spring-like, cooler periods. One excursion through the City to the *Heurigen* (a traditional Viennese leisure-time hangout which could be likened to a pub) turned out to be rather a chilly and wet underfoot adventure. Many participants may still remember the troubles the organizers had in keeping them from going astray in the quite romantic walks through the Vienna Woods to the conference! All in all it has been a memorably amicable time full of scientific discussions in the midst of the Central European summer.

Perhaps one of the most remarkable developments in recent years has been the gradual absorption of many ideas and concepts developed in quantum logic into the physical mainstream. As quantum physicists became accustomed to the algebraic structures and began to explore their empirical content, new experimental insights and stimuli from quantum information and computation theory influenced and excited the quantum structure community at large. These developments could be felt throughout the conference.

The local organizers attempted to minimize administrative efforts by the intensive use of internet-based technology; in particular by an interactive web

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interface to a database containing all relevant information, as well as by using *arxiv.org*, the *de facto* standard for preprint (self)-publication of physical literature. In particular, the editorial procedures for these Proceedings were greatly enhanced by using *arxiv.org* as a front-end. *arxiv.org* provides a free, convenient medium for the dissemination of preprints in variable formats; allowing the editors to easily communicate to the reviewers the submitted manuscripts for evaluation by hyperlinks. The authors in turn may post the revised manuscript versions for further review and processing. This system worked very efficiently as long as the authors were able to cope with the schemata provided by *arxiv.org*. Unfortunately, as time passed, new and stiffer procedures were established by the operators of the preprint archives, and “manuscript relaying” is strongly discouraged now, making it very difficult for the editors of the proceedings to facilitate the prepublication of manuscripts in cases where the authors had insufficient access to, or lacked the willingness to cope with the set-up of the archive. The new endorsement system may contribute to an effective barrier, a digital divide, which the operators of this free preprint archive have established in an attempt to maintain a feasible quality management while keeping the costs low.

This experience could be taken as a further indication as to the viability of integrating the existing manuscript archives into a database operated by an international consortium, probably even administered under the aegis of the United Nations Educational, Scientific and Cultural Organization (UNESCO); with clearly defined editorial and moderation practices.

So, all in all it has been a scientifically stimulating and profitable conference. We would like to take this opportunity to thank all contributors for making this event the success that it was.