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Auszug - Extrait

Obituary for Dionys Baeriswyl

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Dionys 2012 on a hike near Zermatt.

Dionys Baeriswyl (23 June 1944 – 9 August 2023) was an Emeritus Full Professor from the University of Fribourg, Switzerland, who worked on condensed matter theory. Baeriswyl is known primarily for his contributions to the theory of strongly correlated electron systems. In particular, he has conducted fundamental work on conjugated polymers and other quasi-one-dimensional electronic systems, emphasizing early on the importance of electronic correlations in these systems. In addition, Baeriswyl is known for his work on variational-wave-function approaches to one- and two-dimensional correlated

electron systems, applying them to the Peierls and the Mott transitions as well as to superconductivity in high- T_c cuprates. In the course of this work, he introduced the variational wave function now known as the “Baeriswyl wave function,” which can be viewed as the strong-coupling complement to the Gutzwiller wavefunction. While the Gutzwiller wavefunction incorporates correlation effects into the free-electron state, the Baeriswyl wavefunction incorporates itinerant electron movement into a localized, strongly correlated insulating state.

Dionys Baeriswyl attended gymnasium at the benedictine college in Sarnen where he discovered his passions for natural science, foreign languages and music, especially the piano and organ. He concluded his studies in physics in 1969 at the University of Basel with a diploma in theoretical nuclear physics. In 1973 he earned his PhD at the University of Geneva with a thesis on the theory of elementary excitations in superfluid helium. In 1979 he obtained the teaching diploma of higher education of the Canton of Zurich. In 1985 he was given his *Venia Legendi* at the ETH Zurich with a habilitation thesis on theoretical aspects of conducting polymers.

Baeriswyl led the Institute of Theoretical Physics at the University of Fribourg from 1989 until 2000, served as the Dean of the Faculty of Science between 2002 and 2004, and became the President of the Department of Physics from 2007-2009. His administrative roles were marked by his humanist and transparent style, with a profound respect for his students, colleagues, and co-workers.

During his tenure as Dean of the Faculty of Science at the University of Fribourg, Dionys Baeriswyl encountered Swiss Entrepreneur Adolphe Merkle to discuss the granting of the

honorary doctorate at the *Dies Academicus* on 15 November 2003. Merkle donated in 2006, among others through Baeriswyl's facilitation, 100 million Swiss Francs to the University of Fribourg for the foundation of a new scientific institute for nanomaterials (FriMat), later called Adolphe Merkle Institute.

Baeriswyl organized numerous conferences and actively participated in establishing new series of events and meetings. Notable examples are the series of meetings at Gwatt (Switzerland), at the ISI Foundation (Turin, Italy) and at Évora (Portugal).

In addition, Baeriswyl served on the International Advisory Council (IAC) of the International Institute of Physics (IIP) in Natal, Brazil, for six years beginning with its creation in 2009. The IAC provides the academic leadership of the IIP, guiding all the academic programs, new hirings of research leaders, and the development of new research areas. At the IIP, Baeriswyl was also directly involved in the organization of several memorable scientific meetings in condensed matter physics and related topics. After leaving the board, he became an IIP Distinguished Professor and is well known to several generations of students and postdoctoral associates for his inspiring talks and numerous contributions to their research seminars. The many months he stayed in Natal were cherished by all thanks to his high spirits, his critical views of physics and life in general, and his never ending optimism and generosity.

The open, friendly, and transparent style exhibited during Baeriswyl's tenure as Dean of Faculty of Science at Fribourg has been characteristic of his entire career. For example, Baeriswyl resigned a permanent position as a staff member in the RCA Laboratories in 1982 to allow a colleague with a young family to assume that position. As a consequence, Baeriswyl became a “free-lance physicist” between the years of 1982 and 1989. During this period he visited many institutions in Germany, Denmark, United States, Switzerland, and Italy, spreading his influence and ideas widely throughout the physics community.

Among his co-authors on work on conjugated polymers, other one-dimensional systems, and the Hubbard Model are Alan Bishop, David Kelly Campbell, Kazumi Maki, Sumit Mazumdar, José Manuel Pereira Carmelo, and many others, who can be found on his google scholar entry, https://scholar.google.com/scholar?hl=en&as_sdt=0%2C22&q=dionys+baeriswyl&oq=dionys+ba. A list of his most important publications can be found there, too.

Dionys was a member of the Swiss Physical Society for almost 50 years and served in the SPS committee from 2009 - 2012.

He has been an exceptional colleague, mentor, and friend to all of us. He left a beautiful legacy about how to create a better world. He will always remain alive in our heart!

Florian Gebhard, Reinhard Noack, David Campbell, Jose Carmelo, Alvaro Ferraz, and Cristiane Morais Smith