

## Half Staff – Christoph Tschalaer

February 24, 2020



Rockport – Christoph Tschalaer, age 81 of Rockport, passed away on Monday, February 24. He is survived by his wife of 54 years, Joan, and children Ronald of Aptos, Calif. and daughter, Elisabeth of Portland, Ore.. Also by his sisters Barbara Tschalaer and Luzia Leibundgut of Zurich, Switzerland.

Chris was born and raised and educated in Zurich, Switzerland. After graduating from the ETH, he went to Los Angeles, where he completed his doctorate in Nuclear Physics at USC. He and Joan then moved to England where he worked at the Rutherford High Energy Lab in Chilton. From there he moved back to Switzerland to engage in the building and

research of the Swiss Institute of Nuclear Research, now the Paul Scherrer Institute in Villigen. After 20 years, Chris returned to the US to work at MIT.

At SIN/PSI he led target development in the early days. Later he was pivotal in the planning and development of the spallation neutron source. And as head of technical services he was involved in many of the projects at PSI. During this time he was also instrumental in the development of Refuna, a district heating system using the waste heat of a nearby nuclear reactor.

Chris was a distinguished MIT Senior Research Scientist who played a leadership role at the Bates Laboratory at Middleton, over three decades. He was hired by Bates Director Ernie Moniz in 1989 and served as Associate Director for Operations under successive Bates directors Stanley Kowalski and Richard Milner. He oversaw the successful completion of the pioneering SAMPLE experiment to constrain the strange quark contribution to the proton's magnetism, the OOPS experiment to determine the shape of the proton and the BLAST internal target experiment to determine the nucleon's charge and magnetism at long distance scales. Chris played a leading role in the joint Bates-BNL collaboration that developed the first ring-ring electron-ion collider design using the RHIC collider at BNL in 2004. Subsequently, he made important technical contributions to the DarkLight experiment at Jefferson Laboratory and, most recently, was working on a proposal to determine the contribution of two-photon exchange at DESY, Hamburg, Germany. In retirement, he remained active in physics. Chris had a unique ability to make accurate analytic estimates of complicated physical phenomena using pencil, paper and a calculator. His intuitive insight was highly valued by his colleagues at MIT and around the world who had the good fortune to work with him.

In addition to his love of Physics, he enjoyed time with his family, hiking, skiing, sailing, return visits to Switzerland, and living in Rockport. Up to his death he enjoyed walking Long Beach every morning to start his day. He also enjoyed cooking, a great steak, a good beer, singing and the company of dear friends in song and deep conversation. He will be greatly missed by his colleagues, friends, and family.

In keeping with his wishes, his burial will be held privately. A celebration of life will be held at Shalin Liu 37 Main Street, Rockport on Wednesday, March 4th from 1 to 5 p.m. Relatives and friends are invited to attend. Arrangements by Greely Funeral Home 212 Washington Street, Gloucester. For online guestbook please visit [www.greelyfuneralhome.com](http://www.greelyfuneralhome.com)