Biographical Note:

Born in 1940 in Germany, Joachim Frank is a biophysicist considered the founder of single-particle cryo-electron microscopy (cryo-EM), a technique now widely used to determine the structure of biological molecules. He studied physics at the University of Freiburg in 1963 and received the doctorate from the Technical University of Munich in 1970, for a dissertation in the laboratory of Walter Hoppe at the Max Planck Institute for Biochemistry focusing on image processing of electron micrographs. After postdoctoral studies in the USA and the Cavendish Laboratory in Cambridge, he joined the Wadsworth Center in Albany, New York in 1975 as a senior research scientist. In 1985 he became part of the founding faculty for the department of biomedical sciences of the University at Albany. He has been recognized with numerous awards and accolades for his development of the mathematical and computational foundations of cryo-EM and the application of this technique to the study of ribosome structure and function. In 1998 he was named a Howard Hughes Medical Institute (HHMI) Investigator. In 2003 he received an appointment by Columbia University as lecturer and since 2008 he is professor of biochemistry and molecular biophysics and of biological sciences. In 2017, he was awarded the Nobel Prize in Chemistry along with Richard Henderson and Jacques Dubochet for "developing cryo-electron microscopy for high-resolution structural determination of biomolecules in solutions”.