

Professional Career and Field Interests:

Gunther Uhlmann's main current field of interest is inverse problems. These problems arise in all fields of science including medical imaging, geophysical exploration, and non-destructive evaluation, where measurements made on the exterior of a body are used to determine properties of the interior. In the last twenty five years or so there has been remarkable developments in the mathematical theory of inverse problems and Uhlmann will report on some of these in his ICIAM lecture.

Uhlmann was awarded the PhD at MIT in 1976 working under the direction of Victor Guillemin. After postdoctoral positions at Harvard University, the Courant Institute and MIT, he was appointed Assistant Professor at MIT in 1980. Uhlmann was appointed Associate Professor at the University of Washington (UW) in 1984 and he moved to Seattle in 1985. He is currently Full Professor at the Department of Mathematics of UW.

Uhlmann received the Annual Prize of Mathematics of Venezuela in 1982, the Alfred P. Sloan Fellowship in 1984, and a John Simon Guggenheim fellowship in 2001. Uhlmann was the principal lecturer of the CBMS-NSF meeting on "Nondestructive Evaluation" at the University of Kentucky in 1995. He was an invited lecturer at the International Congress of Mathematicians in 1998. Uhlmann also gave an invited lecture at the Annual meeting of the American Mathematical Society in January, 2005. He is a Fellow of the Institute of Physics and member of the Editorial Board of several journals.