

# Biographical Description for The HistoryMakers® Video Oral History with Floyd Williams

PERSON

Williams, FLoyd L.

**Alternative Names:** Floyd Williams;

**Life Dates:** September 20, 1939-

**Place of Birth:** Kansas University, Missouri, USA

**Residence:** Amherst, Massachusetts

**Work:** Amherst, Massachusetts

**Occupations:** Mathematician;

## Biographical Note

Research professor and mathematician Floyd Leroy Williams was born on September 20, 1939 in Kansas City, Missouri. Born into and raised in an impoverished environment, his mother was a constant source of encouragement. She reminded him not to complain about their situation, but rather to maintain faith in God and always work hard. Ironically, as a high school student Williams excelled in music rather than mathematics. One week prior to graduating high school he was offered a scholarship from Lincoln University of Missouri in Jefferson City to study music. During his sophomore year, Williams was fascinated by Albert Einstein's Theory of Relativity and eventually became fully immersed in the study of mathematics.

In 1962, Williams graduated from Lincoln University with his B.S. degree in mathematics. He went on to receive advance degrees in mathematics from Washington University in St. Louis, earning his M.S. degree and Ph.D. degree in 1965 and 1972, respectively. His doctoral thesis was in the field of Lie Theory, a particular branch of mathematics that focuses on symmetry. Williams has worked in this field for the past twenty years and recently has begun to investigate mathematical physics.

From 1972 to 1975, Williams worked as a lecturer and instructor at Massachusetts Institute of Technology as well as an associate instructor at the University of California-Irvine. He joined the faculty at the University of Massachusetts-Amherst in 1975 as an assistant professor. In 1978, he was promoted to associate professor and since 1984 he has been a full professor. Williams was awarded a National Science Foundation Major Research Instrumentation grant in 1983 to continue his research.

Williams is internationally renowned for his pioneering research in Lie Theory and mathematical physics. He served as visiting professor at a number of universities across the United States and the world, including the State University of New York-Stonybrook; Sophia University in Tokyo, Japan; the State Technical University in St. Petersburg, Russia; and the Institute of Theoretical Physics in Sao Paolo, Brazil. Williams' scholarship is prolific, and his work has appeared in scholarly journals such as Topics in Quantum Mechanics and Mathematical Methods in Physics. Since 2005, he served as Professor Emeritus at the University of Massachusetts-Amherst.

Floyd L. Williams was interviewed by The HistoryMakers on 10/08/2012.

## Related Entries

**Washington University in St Louis** [STUDENTOF]

[from ? to ?]

**B.S.**

**Washington University in St Louis** [STUDENTOF]

[from ? to ?]

**M.S.**

**Lincoln University** [STUDENTOF]

[from ? to ?]

**Ph.D.**

**Benjamin Banneker Elementary School** [STUDENTOF]

[from ? to ?]

**R.T. Coles Vocational Junior High School** [STUDENTOF]

[from ? to ?]

**Manual High & Vocational School** [STUDENTOF]

[from ? to ?]

**Diploma**

[EMPLOYEEOF]

[from 1972 to 1991]

**Delete** [EMPLOYEEOF]

[from 1978 to 1982]

**Jazz Musician**

**University of California, Irvine** [EMPLOYEEOF]

[from 1970 to 1970]

**Associate Instructor**

**Massachusetts Institute of Technology (MIT)** [EMPLOYEEOF]

[from 1985 to 1997]

**Instructor**

**University of Massachusetts, Amherst** [EMPLOYEE**OF**]  
[from 1975 to 2004]

**Full Professor**