

Katherine Ella Mounce Weimer

Katherine Ella Mounce Weimer, who had a long and productive career at the Princeton Plasma Physics Laboratory (PPPL), died in Princeton, New Jersey, on 23 April, only three weeks after she had been diagnosed with pancreatic cancer.

Born on 15 April 1919 in Rutherford, New Jersey, Katherine received a scholarship to Purdue University, where she earned a BSc in chemistry in 1939. Continuing her education at Ohio State University, she switched from chemistry to physics, and earned a PhD in 1943 under Marion Llewellyn Pool. As with almost all plasma physicists of her day, she completed her work in a different field: Her thesis was entitled "Artificial Radioactivity of Barium and Lanthanum."

In 1957, after taking care of her three daughters through their early years, she joined the theory group at PPPL. She was the first woman appointed to the research staff and subsequently made many key contributions to important research advancements at PPPL. She worked with many members of the theory group, interacting most closely with us on fundamental research in equilibrium and magnetohydrodynamic stability of toroidal magnetic confinement devices, including both stellarators and tokamaks. Results from her efforts were central to the design and interpretation of most of the experiments at PPPL over the years, which included innovative devices such as the Model C Stellarator, the Adiabatic Toroidal Compressor (ATC), and the Poloidal Divertor Experiment (PDX).

Throughout the cold war, despite the tensions of the time, the fusion program was highly international. Katherine's fluency in French and Russian proved to be a particularly valuable asset at PPPL. She used this talent, together with her exceptional organizational ability and memory, to facilitate many research efforts. She contributed extensively to the organization of both national and international conferences associated with fusion research and plasma theory, and also played a vital role in establishing an outstanding scientific reference library at PPPL.

Over the years, Katherine was a valuable source of guidance and advice to many graduate students from the department of astrophysical sciences at Princeton and to postdoctoral fellows. She retired from Princeton University in 1984 after 29 years at PPPL.

All of us--at PPPL and throughout the fusion energy sciences program--have been most fortunate to have had her as a valued colleague and true friend. She pursued many community interests outside of science. She was an accomplished pianist, and music remained a central part of her life. Concerned with ecological issues, she was a member of the Barnegat Light Historical Society and an active leader in the Central New Jersey Orchid Society. She was also a Girl Scout leader and an avid swimmer.

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