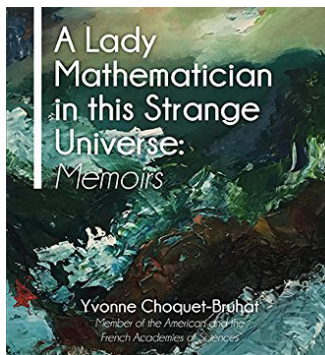## A Lady Mathematician in This Strange Universe

Yvonne Choquet-Bruhat
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William J. Satzer

Yvonne Choquet-Bruhat, born in Lille, France in 1923, is a mathematician who worked largely in mathematical physics. She was the first woman elected to a full membership in the French Academy of Sciences, and she is a member of the American Academy of Arts and Sciences as well. This book is a recollection of her long life and impressive career.

This is a combination of autobiography, memoir and reminiscence that appears to have been written in part at the request of her children. Much of her mathematical work is described in general terms, but there is also a great deal about her family and her travels. She is a specialist in partial differential equations and differential geometry with an emphasis on general relativity, mathematical physics and cosmology. She has written seven books and more than 300 papers. She says that -unlike other mathematicians- she likes to write, at least in part because it helps her clarify and organize her thinking.

The "strange universe" of her title is significant. Choquet-Bruhat is a very independent and unusual thinker. She tells of an experience as a very young child asking her parents about the strangeness she felt from having only direct consciousness of herself, and then rejecting their opinion that she was a solipsist. Later, barely ten years old, she asked her optical physicist father to explain the nature of light to her. Throughout her career she has been engaged in work on the edge of the unknown in cosmology and general relativity. She regards the universe as a very strange business that we are very far from understanding.

Early in her career she spent a term at the Institute for Advanced Study in Princeton working as assistant to Jean Leray. She notes that she had several occasions to speak to Einstein and got an open invitation to visit him any time. She had provided rigorous proofs of properties of the gravitational field that he had conjectured but not proved. During her career Choquet-Bruhat held faculty positions at Marseilles, the University of Reims, and finally at Université Pierre et Marie Curie in Paris, from which she retired in 1992.

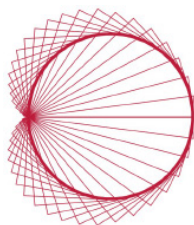Overall her book is a delightful self-portrait of a remarkable woman.

La versión completa de la reseña se encuentra en la página:
https://maa.org/press/maa-reviews/a-lady-mathematician-in-this-strange-universe-memoirs

La escritura

Me gustaría que fuera de otro modo, pero, si quiero escribir, la vida debe oponerme resistencia. La escritura me funciona bajo asedio: bajo el asedio de las distracciones, de las obligaciones diarias. Necesito cerrar la puerta a muchas cosas, organizar con disciplina los trabajos y los días para lograr ese vacío donde, a veces, algo sucede. Me miro ahora, programando entrevistas, dando clases, editando, haciendo la lista de la compra, leyendo diarios, preparando una conferencia, comprando libros, saliendo a correr, pagando las cuentas. El barullo santo y necesario. Uno escribe para perderse y no para encontrarse, decía Leónidas Lamborghini. Si el camino está despejado, ¿cómo va a perderse uno? Hay un poema de Richard Siken que dice: Nunca hay accidentes cuando la habitación está vacía. *Yo no necesito el accidente: necesito saber que existe y defenderme de él.*

Leila Guerriero