

In Memory of Professor Uri Leron – 1938-2023



It is with a heavy heart and an immense sense of loss that I share the news on the recent passing of Professor Uri Leron in Haifa, Israel.

Professor Uri Leron was born on Kibbutz Nir David, Israel on December 22, 1938. On December 5th, 2023, at the age of (almost) 85, he was laid to rest back on the kibbutz where he was born.

Professor Leron earned his three degrees at the Hebrew University of Jerusalem. In 1964, he received his B.Sc. in Mathematics and Physics, in 1966, an M.Sc. in Mathematics, and in 1972, he received his Ph.D. in Mathematics.

Although Professor Uri Leron was a mathematician whose research originally focused on Ring Theory (a field in abstract algebra), in 1980, based on the realization that his contribution would be much more significant and unique if he concentrated on mathematics education instead, Uri decided to switch his research focus to mathematics and computer science education.

In 1983, he joined the Technion's Department of Education in Science and Technology, where he developed his remarkable and influential professional research career in mathematics and computer science education. His work was based on a deep mathematical and scientific understanding that integrated several disciplines, including cognitive and evolutionary psychology, music, and educational systems. Indeed, this transition proved to be highly successful and enormously beneficial.

In retrospect, Uri's decision to transition from mathematical research to educational research significantly influenced the Israeli education system in several areas, with far-reaching impact. Among other things, Professor Leron published more than 50 articles in scientific journals, served in several leadership positions at the Technion and on the national level, and initiated a number of important initiatives that were, at the time,

innovative in their field. These achievements, together and each separately, influenced the Israeli education system both directly and indirectly through the dozens of undergraduate and graduate students he mentored and educated throughout the years.

In the last twenty years, Professor Leron delved into research in cognitive and evolutionary psychology, in order to deepen our understanding of the source of the difficulties students encounter in understanding mathematical formalism. Based on research in cognitive and evolutionary psychology, Uri investigated the conflict between intuitive thinking and analytical thinking, and sought ways in which mathematics educators can bridge these two types of thinking.

Uri loved mathematics and a large part of his efforts in research and practice were an attempt to instill that love in his students, by a variety of ways, such as exposing the intuitive (human) side of mathematics, learning through activities, and integrating digital technologies into learning. He applied constructivist approaches (for example, by using the Logo programming language) even before the term and approach became popular in the mathematics education community, and he continued to apply those methods even after their popularity declined.

The importance Professor Leron attributed to the accessibility of mathematics in general, and of mathematical proofs in particular, earned him international recognition. Among other things, he was a visiting scientist at MIT, Berkley, and Stanford, and was awarded a residency scholarship at the Rockefeller Center in Bellagio, Italy in May 2005.

In addition to being a leading researcher, Professor Leron was a dedicated family man. Together with his wife Yael, he had 3 children and 6 grandchildren. His cleverness extended beyond his professional life, manifesting in a fine, precise, and unique sense of humor. This humor was another lens through which he viewed the world, a central component of his communication. He possessed a rare ability to discern the absurd, the ridiculous, or the inflated in any situation, often surprising those around him with a witty statement that never failed to bring laughter.

For many of us he was a dear friend, whose advice on many aspects of life will continue to guide us for years to come.

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