



Raphael (Ray) Aaron Burnstein

October 5, 1930 - October 23, 2025

Raphael (Ray) Aaron Burnstein of Hinsdale, IL, passed away on October 23, 2025. He was born in Harrisburg, PA, on October 5, 1930. His father, Alexander was a Rabbi, and his mother, Etta (Kosofsky), was an elementary school teacher. The family moved East and Ray attended Stuyvesant High School in New York City and then the University of Chicago where he earned a BS degree in Physics. He then earned an MS at the University of Washington in Seattle and then went on to earn a PhD in Physics at the University of Michigan where he worked under the supervision of Professor Donald Glaser who won the Nobel Prize in Physics for the invention of the bubble chamber which is used to study sub-atomic particles.

After earning his PhD Ray was hired for a faculty position at the University of Maryland where he was a member of the High Energy Physics group. Subsequently he went on to obtain a faculty position at the Illinois Institute of Technology (IIT) where he became a Professor of Physics. He founded the High Energy Physics group at IIT. Ray and his colleagues at the University collaborated with physicists at Argonne National Laboratory and Fermilab to build state-of-the-art devices for studying elementary particles. Ray was the co-author of many research papers in the field of Particle Physics because of these studies. He was a Fellow of the American Physical Society.

Ray loved physics and wanted to encourage young people to go into the field.

He was very interested in physics education and in retirement he continued this interest and co-authored several papers in the field with Professor Leon Lederman a colleague at IIT. He also spent time at the University of Texas in Austin where he continued to pursue this interest working with faculty and staff there.

Photography was a great hobby of Rays' and he was well known among friends, family and colleagues for the photographs he took of their families. Ray also liked to garden and was an avid grower of tomatoes in his earlier years. Each Fall there was a bumper crop which was distributed to friends and neighbors. Lastly, Ray had a love of building and re-engineering mechanical devices whether they were scientific instruments, cars, or home-related objects. He was very involved in designing and building additions to our homes.

Ray is survived by his wife of 61 years, Ilene; his sons, Kenneth and Jonathan; his cousins, Becky Lipton (Ronald), Debbie Bornstein Sklare (Steve), Judy Upton (Keith); his sister-in-law, Paula Dick (Brian); his niece, Meredith Pullen (Scott); his nephew, Andrew Dick (Christine); and grand nieces and nephews. He is preceded in death by his parents; brother, Ira (Jerry) Burnell; cousin, Hershel Bornstein; many beloved Midwest cousins, as well as his friend and life-long buddy, Hans Mark. A graveside service will be held on Tuesday, October 28, 2025, at 1 p.m. at Temple Beth El Cemetery, 2700 Willowdale Road, Portage, IN. Burns Funeral Home & Crematory, Crown Point, IN, entrusted with arrangements. www.burnsfuneral.com

Cemetery Details

Temple Beth El

Portage, IN

Previous Events

Graveside Service

OCT 28. 1:00 PM (cst)

Temple Beth El
Portage, IN

Tribute Wall

PJ

“ Actually, I what I admired most about Ray was his organization of the refurbishment of the Hinsdale house on an IIT Professor's salary. It was "gypsy physicist" style at its most basic. In this day of tear-downs and McMansions, his accomplishment was truly remarkable.

And, I will tell a physics story. One day in January it was incredibly cold. Ray went to an all-day meeting at Fermilab. To keep his Mercedes diesel from freezing, he kept it running (idling) all day. He used two gallons of diesel fuel, but avoided a service call! I call that "smart"!

Porter W Johnaon

Porter W Johnson - November 21, 2025 at 11:21 AM

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“ Ray was a a valued colleague in the Illinois Tech Physics Department and the founder of our High Energy Physics research program. He will be missed.

Carlo Segre - November 20, 2025 at 01:44 PM