

1 HOUSE RESOLUTION

2 WHEREAS, The members of the Illinois House of
3 Representatives wish to express their sincere condolences to
4 the family and friends of Ugo Fano, who passed away on
5 February 13, 2001; and

6 WHEREAS, Mr. Fano was a groundbreaking nuclear physicist
7 who discovered how light and matter interact at the subatomic
8 level; and

9 WHEREAS, Mr. Fano was a former chairman of the University
10 of Chicago's physics department, and a professor emeritus
11 there since 1982; and

12 WHEREAS, As a student of Enrico Fermi and Werner
13 Heisenberg in the 1930's, Professor Fano provided one of the
14 few direct links between modern researchers and what has been
15 termed physic's Golden Age at the beginning of the 20th
16 century; he predicted spinning electrons, explained the
17 reason behind asymmetrical spectral shapes emitted by excited
18 atoms, and indentified the effects of radioactivity on human
19 genes; and

20 WHEREAS, Professor Fano was adept at spotting unseen
21 implications in other people's research; he earned the
22 reputation for explaining apparently diverse and complex
23 phenomena into simple and practical descriptions; his work
24 led to a wide range of practical applications in fields from
25 nuclear medicine to laser research; and

26 WHEREAS, Professor Fano was born in Torino, Italy; his
27 father was a renowned mathematician, but Professor Ugo
28 gravitated to atomic physics by the time he was a teen; he
29 received his doctorate in mathematics from the University of
30 Torino in 1934 and did postdoctoral work at the University of
31 Rome until 1936; and

1 WHEREAS, Professor Fano led U.S. research in the 1940's
2 and 1950's to discover the effects of radiation on biological
3 systems; in 1959, he co-wrote a book on the mathematics
4 underlying interactions between atomic particles and
5 radiation; in the same year he co-wrote a book with his wife,
6 Camilla, on basic physics of atoms and molecules; and

7 WHEREAS, Professor Fano joined the faculty at the
8 University of Chicago in 1966; in 1968, he authored an
9 article that set an agenda for particle accelerator research
10 that has lasted for decades; in the late 1960's he forecasted
11 that by shooting beams of light with certain known energies
12 at atoms, electrons could be kicked off and spun in
13 predictable directions; This work produced a key method for
14 creating spin-polarized electron beams, which would later be
15 used to probe groupings of molecules and magnetic materials
16 to discover their structures; and

17 WHEREAS, At the University of Chicago, Professor Fano was
18 regarded as an accomplished and demanding teacher; he was
19 appointed chairman of the University of Chicago's physics
20 department in 1972; and

21 WHEREAS, Professor Fano earned many awards and
22 distinctions during his life which included the United States
23 Department of Energy's Enrico Fermi Award in 1996, his
24 election into the Royal Society of London in 1995 and to the
25 Accademia Nazionale dei Lincei in 1993; He was the recipient
26 of the United States Department of Commerce Award in 1968,
27 the Stratton Award from the National Bureau of Standards in
28 1963, and the Rockefeller Public Service Award in 1956; and

29 WHEREAS, The passing of Ugo Fano will be deeply felt by
30 all who knew and loved him, especially his wife, Camilla, his
31 daughters, Mary Giacomoni and Virginia Ghattas; his brother,
32 Robert Fano; and his grandchildren; therefore, be it

1 RESOLVED, BY THE HOUSE OF REPRESENTATIVES OF THE
2 NINETY-SECOND GENERAL ASSEMBLY OF THE STATE OF ILLINOIS, that
3 we mourn, along with all who knew him, the death of the
4 University of Chicago's world renowned professor, Ugo Fano of
5 Chicago, Illinois; and be it further

6 RESOLVED, That a suitable copy of this resolution be
7 presented to the family of Ugo Fano with our sincere
8 condolences.