## The Board of Supervisors of Contra Costa County, California

In the matter of honoring Dr. John Clauser on receiving the Nobel Prize in Physics.

Resolution No. 2022/387

WHEREAS, Dr. John Clauser, a Walnut Creek resident, has had a long and distinguished career in experimental and theoretical Physics; and

WHEREAS, John received his Bachelor of Science in Physics, from the California Institute of Technology in 1964; and

WHEREAS, he received his Master of Arts and Ph.D. in Physics in 1966 and 1969, respectively, from Columbia University; and

WHEREAS, from 1969 to the present, Dr. Clauser worked at UC Berkeley, Lawrence Berkeley National Laboratory, Lawrence Livermore National Laboratory and his own company, J. F. Clauser & Assoc., in Walnut Creek; and

WHEREAS, in 1972, he performed an experiment that measured the correlations between the polarizations of pairs of photons that were created in atomic transitions; and

WHEREAS, this experiment showed that Bell's inequality was violated – which meant that the photon pairs were entangled; and

WHEREAS, this discovery became a core concept of quantum mechanics; and

WHEREAS, in 2022, Dr. John Clauser, Alain Aspect and Anton Zeilinger together received the Nobel Prize in Physics for their work in quantum mechanics, which showed "quantum entanglement," an odd phenomenon in which one particle can instantaneously influence the behavior of other particles — even if they are far away, such as at opposite sides of the universe; and

NOW, THEREFORE, BE IT RESOLVED that the Board of Supervisors of Contra Costa County does hereby recognizes Dr. John Clauser for his revolutionary experiments and long career as a Physicist in our community.

PASSED by a unanimous vote of the Board of Supervisors members present this 1st day of November 2022.

KAREN MITCHOFF

Chair,

District IV Supervisor

JOHN GIOLA

District I Supervisor

DIANE BURGIS

District III Supervisor

CANDACE ANDERSEN

District II Supervisor

FEDERAL D. GLOVER

District V Supervisor

I hereby certify that this is a true and correct copy of an action taken and entered on the minutes of the Board of Supervisors on the date shown:

ATTESTED: November 1, 2022

MONICA NINO, Clerk of the Board of Supervisors and County Administrator

By

Deputy