

## Video Article

# An interview with Nobel laureate Roy Glauber, Physics 2005

Roy Glauber<sup>1</sup>

1

URL: <https://www.jove.com/video/1535>

DOI: [doi:10.3791/1535](https://doi.org/10.3791/1535)

Keywords: Physics, Issue 28, Quantum Optics, Light, Wave Particle Duality, Los Alamos, Lindau, Nobel Laureate

Date Published: 6/26/2009

Citation: Glauber, R. An interview with Nobel laureate Roy Glauber, Physics 2005. *J. Vis. Exp.* (28), e1535, doi:10.3791/1535 (2009).

## Abstract

The field of quantum optics rests on the work of Roy Glauber, who helped elucidate the nature of light as both particles and waves. According to Glauber, quantum optics allowed "all sorts of experiments...that never could have been done before." He suggests that it was not his "small revelation" that the Nobel Committee awarded, but rather the decades of research that followed his own. Nonetheless, Glauber received one-half of the 2005 Nobel Prize in Physics "for his contribution to the quantum theory of optical coherence" while the other half was shared by John Hall and Theodor Hänsch for their work on laser-based precision spectroscopy. Glauber admits that the behavior of light seems strange and unintuitive - yet the phenomena that Einstein called "spooky action at a distance" may have many practical applications.

In this candid interview, Glauber shares his thoughts about working at Los Alamos National Laboratory - his shock to learn that he was helping to build The Bomb, and his dismay about how it was used. At Los Alamos, Glauber met two of his major influences: Julian Schwinger, who was Glauber's thesis advisor at Harvard, and Los Alamos scientific director Robert Oppenheimer, who facilitated his early post-doctoral research. Glauber also tells a poignant account of how his marriage fell victim to the social upheaval of the 1960's, and how he was left to raise two children alone. Despite the difficulties of reconciling academia with family, Glauber is amused to find himself revered by women as "someone who has raised children and nonetheless had a successful academic career."

## Video Link

The video component of this article can be found at <https://www.jove.com/video/1535/>

## Disclosures

The authors have nothing to disclose.