

A Nobel prize timeline related to light, masers and lasers, and their applications



1902 Lorentz and Zeeman

The Zeeman Effect, Electron Oscillator Model

Phototherapy-Use Of UV Light To Treat Lupus

The Michelson Interferometer & Precision Measurements

1908 Lippmann

Colour Photography Based On Interference

Description Of The Refractive Optics Of The Eye

1912 Dalén

Solar-Based Regulator For Buoys And Lighthouses

1918 Planck **Energy Quanta**

1919 Stark The Stark Effect

1921 Einstein Photoelectric Effect & Services To Theoretical Physics

1922 Bohr

Atomic Structure And The Nature Of Radiation

Elementary Charge And The Photoelectric Effect

1927 Compton

The Compton Effect

1930 Raman

Raman Scattering

Creation Of Quantum Mechanics

1933 Schrodinger and Dirac

New Productive Forms Of Atomic Theory

1945 Pauli

Pauli Exclusion Principle

1953 Zernike

Phase Contrast Microscope

Statistical Interpretation Of The Wavefunction

Fine Structure Of The H.Spectrum (Lamb Shift, QED)

Townes, Basov, and Prokhorov

Maser-Laser Principle

1966 Kastler

Precision Studies Of Optical Resonances

(1967) Granit, Hartline, and Wald

Physiological And Chemical Visual Processes In The Eye

Eigen, Norrish, and Porter

Flashlamp Pump-Probe Studies Of Chemical Reactions (µs)

Holography

1981 Bloembergen and Schawlow

Laser Spectroscopy

1981 Hubel and Wiesel Information Processing In The Visual System

1989 Ramsey, Dehmelt, and Paul

Atomic Clocks, The Ion Trap

1997 Chu, Cohen-Tannoudji, and Phillips

Laser Cooling and Trapping

1999 Zewail

Femtochemistry

2000 Alferov and Kroemer

Optoelectronics, Semiconductor Heterostructures

2001 Cornell, Ketterle, and Wieman

Bose Einstein Condensation

2005 Glauber, Hall, and Haensch

Quantum Optics, Spectroscopy, Optical Frequency Comb

2008 Shimomura, Chalfie, and Tsien

Green Fluorescent Protein GFP

Kao, Boyle, and Smith
Optical Fiber Communications; Imaging And The CCD

2012 Haroche and Wineland

Individual Quantum Systems

2014 Akasaki, Amano, and Nakamura

The Blue LED And Energy-Saving White Light Sources

Betzig, Hell, and Moerner

Super-Resolution Microscopy

2018 Ashkin, Mourou, and Strickland

Optical Tweezers & Biophotonics Chirped Pulse Amplification





