

Year	Laureate	Country	Rationale
1901	Wilhelm Conrad Röntgen	Germany	"in recognition of the extraordinary services he has rendered by the discovery of the remarkable rays subsequently named after him"
1902	Hendrik Lorentz	Netherlands	"in recognition of the extraordinary service they rendered by their researches into the influence of magnetism upon radiation phenomena"
	Pieter Zeeman	Netherlands	
1903	Antoine Henri Becquerel	France	"for his discovery of spontaneous radioactivity"
	Pierre Curie	France	"for their joint researches on the radiation phenomena discovered by Professor Henri Becquerel"
	Maria Skłodowska-Curie	Poland France	
1904	Lord Rayleigh	United Kingdom	"for his investigations of the densities of the most important gases and for his discovery of argon in connection with these studies"
1905	Philipp Eduard Anton von Lenard	Austria-Hungary Germany	"for his work on cathode rays"
1906	Joseph John Thomson	United Kingdom	"for his theoretical and experimental investigations on the conduction of electricity by gases"
1907	Albert Abraham Michelson	United States Poland	"for his optical precision instruments and the spectroscopic and metrological investigations carried out with their aid"
1908	Gabriel Lippmann	France	"for his method of reproducing colours photographically based on the phenomenon of interference"
1909	Guglielmo Marconi	Italy	"for their contributions to the development of wireless telegraphy"
	Karl Ferdinand Braun	Germany	
1910	Johannes Diderik van der Waals	Netherlands	"for his work on the equation of state for gases and liquids"
1911	Wilhelm Wien	Germany	"for his discoveries regarding the laws governing the radiation of heat"
1912	Nils Gustaf Dalén	Sweden	"for his invention of automatic valves designed to be used in combination with gas accumulators in lighthouses and buoys"
1913	Heike Kamerlingh-Onnes	Netherlands	"for his investigations on the properties of matter at low temperatures which led, inter alia, to the production of liquid helium"
1914	Max von Laue	Germany	"For his discovery of the diffraction of X-rays by crystals", an important step in the development of X-ray spectroscopy.
1915	William Henry Bragg	United Kingdom	"For their services in the analysis of crystal structure by means of X-rays", an important step in the development of X-ray crystallography
	William Lawrence Bragg	Australia United Kingdom	
1916			
1917	Charles Glover Barkla	United Kingdom	"For his discovery of the characteristic Röntgen radiation of the elements", another important step in the development of X-ray spectroscopy
1918	Max Planck	Germany	"for the services he rendered to the advancement of physics by his discovery of energy quanta"
1919	Johannes Stark	Germany	"for his discovery of the Doppler effect in canal rays and the splitting of spectral lines in electric fields"
1920	Charles Édouard Guillaume	Switzerland	"for the service he has rendered to precision measurements in physics by his discovery of anomalies in nickel-steel alloys"
1921	Albert Einstein	Germany Switzerland	"for his services to theoretical physics, and especially for his discovery of the law of the photoelectric effect"

1922	Niels Bohr	Denmark	"for his services in the investigation of the structure of atoms and of the radiation emanating from them"
1923	Robert Andrews Millikan	United States	"for his work on the elementary charge of electricity and on the photoelectric effect"
1924	Manne Siegbahn	Sweden	"for his discoveries and research in the field of X-ray spectroscopy"
1925	James Franck	Germany	"for their discovery of the laws governing the impact of an electron upon an atom"
	Gustav Hertz	Germany	
1926	Jean Baptiste Perrin	France	"for his work on the discontinuous structure of matter, and especially for his discovery of sedimentation equilibrium"
1927	Arthur Holly Compton	United States	"for his discovery of the effect named after him"
	Charles Thomson Rees Wilson	United Kingdom	"for his method of making the paths of electrically charged particles visible by condensation of vapour"
1928	Owen Willans Richardson	United Kingdom	"for his work on the thermionic phenomenon and especially for the discovery of the law named after him"
1929	Louis Victor Pierre Raymond, 7th Duc de Broglie	France	"for his discovery of the wave nature of electrons"
1930	Chandrasekhara Venkata Raman	India	"for his work on the scattering of light and for the discovery of the effect named after him"
1931			
1932	Werner Heisenberg	Germany	"for the creation of quantum mechanics, the application of which has, inter alia, led to the discovery of the allotropic forms of hydrogen"
1933	Erwin Schrödinger	Austria	"for the discovery of new productive forms of atomic theory"
	Paul Dirac	United Kingdom	
1934			
1935	James Chadwick	United Kingdom	"for the discovery of the neutron"
1936	Victor Francis Hess	Austria	"for his discovery of cosmic radiation"
	Carl David Anderson	United States	"for his discovery of the positron"
1937	Clinton Joseph Davisson	United States	"for their experimental discovery of the diffraction of electrons by crystals"
	George Paget Thomson	United Kingdom	
1938	Enrico Fermi	Italy	"for his demonstrations of the existence of new radioactive elements produced by neutron irradiation, and for his related discovery of nuclear reactions brought about by slow neutrons"
1939	Ernest Lawrence	United States	"for the invention and development of the cyclotron and for results obtained with it, especially with regard to artificial radioactive elements"
1940			
1941			
1942			
1943	Otto Stern	United States	"for his contribution to the development of the molecular ray method and his discovery of the magnetic moment of the proton"
		Germany	
1944	Isidor Isaac Rabi	United States Poland	"for his resonance method for recording the magnetic properties of atomic nuclei"
1945	Wolfgang Pauli	Austria	"for the discovery of the Exclusion Principle, also called the Pauli principle"

1946	Percy Williams Bridgman	United States	"for the invention of an apparatus to produce extremely high pressures, and for the discoveries he made there within the field of high pressure physics"
1947	Edward Victor Appleton	United Kingdom	"for his investigations of the physics of the upper atmosphere especially for the discovery of the so-called Appleton layer"
1948	Patrick Maynard Stuart Blackett	United Kingdom	"for his development of the Wilson cloud chamber method, and his discoveries therewith in the fields of nuclear physics and cosmic radiation"
1949	Hideki Yukawa	Japan	"for his prediction of the existence of mesons on the basis of theoretical work on nuclear forces"
1950	Cecil Frank Powell	United Kingdom	"for his development of the photographic method of studying nuclear processes and his discoveries regarding mesons made with this method"
1951	John Douglas Cockcroft	United Kingdom	"for their pioneer work on the transmutation of atomic nuclei by artificially accelerated atomic particles"
	Ernest Thomas Sinton Walton	Ireland	
1952	Felix Bloch	Switzerland United States	"for their development of new methods for nuclear magnetic precision measurements and discoveries in connection therewith"
	Edward Mills Purcell	United States	
1953	Frits Zernike	Netherlands	"for his demonstration of the phase contrast method, especially for his invention of the phase contrast microscope"
1954	Max Born	West Germany	"for his fundamental research in quantum mechanics, especially for his statistical interpretation of the wavefunction"
	Walther Bothe	West Germany	"for the coincidence method and his discoveries made therewith"
1955	Willis Eugene Lamb	United States	"for his discoveries concerning the fine structure of the hydrogen spectrum"
	Polykarp Kusch	United States Germany	"for his precision determination of the magnetic moment of the electron"
1956	John Bardeen	United States	"for their researches on semiconductors and their discovery of the transistor effect"
	Walter Houser Brattain	United States	
	William Bradford Shockley	United States	
1957	Tsung-Dao Lee	Republic of China	"for their penetrating investigation of the so-called parity laws which has led to important discoveries regarding the elementary particles"
	Chen-Ning Yang	Republic of China	
1958	Pavel Alekseyevich Cherenkov	Soviet Union	"for the discovery and the interpretation of the Cherenkov effect"
	Ilya Frank	Soviet Union	
	Igor Yevgenyevich Tamm	Soviet Union	
1959	Emilio Gino Segrè	Italy United States	"for their discovery of the antiproton"
	Owen Chamberlain	United States	
1960	Donald Arthur Glaser	United States	"for the invention of the bubble chamber"
1961	Robert Hofstadter	United States	"for his pioneering studies of electron scattering in atomic nuclei and for his thereby achieved discoveries concerning the structure of the nucleons"
	Rudolf Ludwig Mössbauer	West Germany	"for his researches concerning the resonance absorption of gamma radiation and his discovery in this connection of the effect which bears his name"
1962	Lev Davidovich Landau	Soviet Union	"for his pioneering theories for condensed matter, especially liquid helium"
1963	Eugene Paul Wigner	Hungary United States	"for his contributions to the theory of the atomic nucleus and the elementary particles, particularly through the discovery and application of fundamental symmetry principles"
	Maria Goeppert-Mayer	United States	
	J. Hans D. Jensen	West Germany	
1964	Nicolay Gennadiyevich Basov	Soviet Union	"for fundamental work in the field of quantum electronics, which has led to the construction of oscillators and amplifiers based on the maser-laser principle"
	Alexander Prokhorov	Soviet Union	
	Charles Hard Townes	United States	
	Richard Phillips Feynman	United States	

1965	Julian Schwinger	United States	"for their fundamental work in quantum electrodynamics (QED), with deep-ploughing consequences for the physics of elementary particles"
	Shin'ichirō Tomonaga	Japan	
1966	Alfred Kastler	France	"for the discovery and development of optical methods for studying Hertzian resonances in atoms"
1967	Hans Albrecht Bethe	United States Germany	"for his contributions to the theory of nuclear reactions, especially his discoveries concerning the energy production in stars"
1968	Luis Walter Alvarez	United States	"for his decisive contributions to elementary particle physics, in particular the discovery of a large number of resonance states, made possible through his development of the technique of using hydrogen bubble chamber and data analysis"
1969	Murray Gell-Mann	United States	"for his contributions and discoveries concerning the classification of elementary particles and their interactions"
1970	Hannes Olof Gösta Alfvén	Sweden	"for fundamental work and discoveries in magneto-hydrodynamics with fruitful applications in different parts of plasma physics"
	Louis Néel	France	"for fundamental work and discoveries concerning antiferromagnetism and ferrimagnetism which have led to important applications in solid state physics"
1971	Dennis Gabor	Hungary United Kingdom	"for his invention and development of the holographic method"
1972	John Bardeen	United States	"for their jointly developed theory of superconductivity, usually called the BCS-theory"
	Leon Neil Cooper	United States	
	John Robert Schrieffer	United States	
1973	Leo Esaki	Japan	"for their experimental discoveries regarding tunneling phenomena in semiconductors and superconductors, respectively"
	Ivar Giaever	United States Norway	
	Brian David Josephson	United Kingdom	
1974	Martin Ryle	United Kingdom	"for their pioneering research in radio astrophysics: Ryle for his observations and inventions, in particular of the aperture synthesis technique, and Hewish for his decisive role in the discovery of pulsars"
	Antony Hewish	United Kingdom	
1975	Aage Bohr	Denmark	"for the discovery of the connection between collective motion and particle motion in atomic nuclei and the development of the theory of the structure of the atomic nucleus based on this connection"
	Ben Roy Mottelson	Denmark	
	Leo James Rainwater	United States	
1976	Burton Richter	United States	"for their pioneering work in the discovery of a heavy elementary particle of a new kind"
	Samuel Chao Chung Ting	United States	
1977	Philip Warren Anderson	United States	"for their fundamental theoretical investigations of the electronic structure of magnetic and disordered systems"
	Nevill Francis Mott	United Kingdom	
	John Hasbrouck Van Vleck	United States	
1978	Pyotr Leonidovich Kapitsa	Soviet Union	"for his basic inventions and discoveries in the area of low-temperature physics"
	Arno Allan Penzias	United States	"for their discovery of cosmic microwave background radiation"
	Robert Woodrow Wilson	United States	
1979	Sheldon Lee Glashow	United States	"for their contributions to the theory of the unified weak and electromagnetic interaction between elementary particles, including, inter alia, the prediction of the weak neutral current"
	Abdus Salam	Pakistan	
	Steven Weinberg	United States	
1980	James Watson Cronin	United States	"for the discovery of violations of fundamental symmetry principles in the decay of neutral K-mesons"
	Val Logsdon Fitch	United States	
1981	Nicolaas Bloembergen	Netherlands United States	"for their contribution to the development of laser spectroscopy"
	Arthur Leonard Schawlow	United States	
	Kai Manne Börje Siegbahn	Sweden	

1982	Kenneth G. Wilson	United States	"for his theory for critical phenomena in connection with phase transitions"
1983	Subrahmanyan Chandrasekhar	India United States	"for his theoretical studies of the physical processes of importance to the structure and evolution of the stars"
	William Alfred Fowler	United States	"for his theoretical and experimental studies of the nuclear reactions of importance in the formation of the chemical elements in the universe"
1984	Carlo Rubbia	Italy	"for their decisive contributions to the large project, which led to the discovery of the field particles W and Z, communicators of weak interaction"
	Simon van der Meer	Netherlands	
1985	Klaus von Klitzing	West Germany	"for the discovery of the quantized Hall effect"
1986	Ernst Ruska	West Germany	"for his fundamental work in electron optics, and for the design of the first electron microscope"
	Gerd Binnig	West Germany	"for their design of the scanning tunneling microscope"
	Heinrich Rohrer	Switzerland	
1987	Johannes Georg Bednorz	West Germany	"for their important break-through in the discovery of superconductivity in ceramic materials"
	Karl Alexander Müller	Switzerland	
1988	Leon Max Lederman	United States	"for the neutrino beam method and the demonstration of the doublet structure of the leptons through the discovery of the muon neutrino"
	Melvin Schwartz	United States	
	Jack Steinberger	United States	
1989	Norman Foster Ramsey	United States	"for the invention of the separated oscillatory fields method and its use in the hydrogen maser and other atomic clocks"
	Hans Georg Dehmelt	United States Germany	"for the development of the ion trap technique"
	Wolfgang Paul	West Germany	
1990	Jerome I. Friedman	United States	"for their pioneering investigations concerning deep inelastic scattering of electrons on protons and bound neutrons, which have been of essential importance for the development of the quark model in particle physics"
	Henry Way Kendall	United States	
	Richard E. Taylor	Canada	
1991	Pierre-Gilles de Gennes	France	"for discovering that methods developed for studying order phenomena in simple systems can be generalized to more complex forms of matter, in particular to liquid crystals and polymers"
1992	Georges Charpak	France Poland	"for his invention and development of particle detectors, in particular the multiwire proportional chamber"
1993	Russell Alan Hulse	United States	"for the discovery of a new type of pulsar, a discovery that has opened up new possibilities for the study of gravitation"
	Joseph Hooton Taylor Jr.	United States	
1994	Bertram Brockhouse	Canada	"for the development of neutron spectroscopy" and "for pioneering contributions to the development of neutron scattering techniques for studies of condensed matter"
	Clifford Glenwood Shull	United States	"for the development of the neutron diffraction technique" and "for pioneering contributions to the development of neutron scattering techniques for studies of condensed matter"
1995	Martin Lewis Perl	United States	"for the discovery of the tau lepton" and "for pioneering experimental contributions to lepton physics"
	Frederick Reines	United States	"for the detection of the neutrino" and "for pioneering experimental contributions to lepton physics"
1996	David Morris Lee	United States	"for their discovery of superfluidity in helium-3"
	Douglas D. Osheroff	United States	
	Robert Coleman Richardson	United States	
1997	Steven Chu	United States	"for development of methods to cool and trap atoms with laser light."
	Claude Cohen-Tannoudji	France	
	William Daniel Phillips	United States	
1998	Robert B. Laughlin	United States	
	Horst Ludwig Störmer	Germany	

1998	Daniel Chee Tsui	Republic of China United States	"for their discovery of a new form of quantum fluid with fractionally charged excitations"
1999	Gerard 't Hooft	Netherlands	"for elucidating the quantum structure of electroweak interactions in physics"
	Martinus J. G. Veltman	Netherlands	
2000	Zhores Ivanovich Alferov	Russia	"for developing semiconductor heterostructures used in high-speed- and optoelectronics"
	Herbert Kroemer	Germany	
	Jack St. Clair Kilby	United States	
2001	Eric Allin Cornell	United States	"for the achievement of Bose–Einstein condensation in dilute gases of alkali atoms, and for early fundamental studies of the properties of the condensates"
	Carl Edwin Wieman	United States	
	Wolfgang Ketterle	Germany	
2002	Raymond Davis Jr.	United States	"for pioneering contributions to astrophysics, in particular for the detection of cosmic neutrinos"
	Masatoshi Koshiba	Japan	
	Riccardo Giacconi	Italy United States	
2003	Alexei Alexeyevich Abrikosov	Russia United States	"for pioneering contributions to the theory of superconductors and superfluids"
	Vitaly Lazarevich Ginzburg	Russia	
	Anthony James Leggett	United Kingdom United States	
2004	David J. Gross	United States	"for the discovery of asymptotic freedom in the theory of the strong interaction"
	Hugh David Politzer	United States	
	Frank Wilczek	United States	
2005	Roy J. Glauber	United States	"for his contribution to the quantum theory of optical coherence"
	John L. Hall	United States	"for their contributions to the development of laser-based precision spectroscopy, including the optical frequency comb technique"
	Theodor W. Hänsch	Germany	
2006	John C. Mather	United States	"for their discovery of the blackbody form and anisotropy of the cosmic microwave background radiation"
	George F. Smoot	United States	
2007	Albert Fert	France	"for the discovery of giant magnetoresistance"
	Peter Grünberg	Germany	
2008	Makoto Kobayashi	Japan	"for the discovery of the origin of the broken symmetry which predicts the existence of at least three families of quarks in nature"
	Toshihide Maskawa	Japan	
	Yoichiro Nambu	Japan United States	
2009	Charles K. Kao	Hong Kong United Kingdom United States	"for groundbreaking achievements concerning the transmission of light in fibers for optical communication"
	Willard S. Boyle	Canada United States	"for the invention of an imaging semiconductor circuit – the CCD sensor"
	George E. Smith	United States	
2010	Andre Geim	Russia United Kingdom Netherlands	"for groundbreaking experiments regarding the two-dimensional material graphene"
	Konstantin Novoselov	Russia United Kingdom	

2011	Saul Perlmutter	United States	"for the discovery of the accelerating expansion of the Universe through observations of distant supernovae"
	Brian P. Schmidt	Australia United States	
	Adam G. Riess	United States	
2012	Serge Haroche	France	"for ground-breaking experimental methods that enable measuring and manipulation of individual quantum systems."
	David J. Wineland	United States	
2013	François Englert	Belgium	"for the theoretical discovery of a mechanism that contributes to our understanding of the origin of mass of subatomic particles, and which recently was confirmed through the discovery of the predicted fundamental particle, by the ATLAS and CMS experiments at CERN's Large Hadron Collider"
	Peter Higgs	United Kingdom	
2014	Isamu Akasaki	Japan	"for the invention of efficient blue light-emitting diodes which has enabled bright and energy-saving white light sources"
	Hiroshi Amano	Japan	
	Shuji Nakamura	Japan United States	
2015	Takaaki Kajita	Japan	"for the discovery of neutrino oscillations, which shows that neutrinos have mass"
	Arthur B. McDonald	Canada	
2016	David J. Thouless	United Kingdom	"for theoretical discoveries of topological phase transitions and topological phases of matter"
	F. Duncan M. Haldane	United Kingdom	
	John M. Kosterlitz	United Kingdom	
2017	Rainer Weiss	Germany United States	"for decisive contributions to the LIGO detector and the observation of gravitational waves"
	Kip Thorne	United States	
	Barry Barish	United States	
2018	Arthur Ashkin	United States	"for groundbreaking inventions in the field of laser physics"
	G�rard Mourou	France	
	Donna Strickland	Canada	