

# CONTRIBUTIONS OF CIVILIZATIONS TO INTERNATIONAL PRIZES

Split of Nobel prizes and Fields medals by civilization :

| Civilization          | Occidental /<br>Judeo-christian | Asian | Indian | Muslim<br>arabic | Black<br>african |
|-----------------------|---------------------------------|-------|--------|------------------|------------------|
| Physics               | 198                             | 14    | 2      |                  |                  |
| Chemistry             | 167                             | 6     | 1      | 2                |                  |
| Physiology / Medicine | 215                             | 7     | 1      |                  |                  |
| Literature            | 110                             | 5     | 2      | 1                |                  |
| Economy               | 82                              |       | 1      |                  |                  |
| Mathematics           | 53                              | 5     |        | 2                |                  |
|                       | 94%                             | 4%    | 1%     | 1%               | 0%               |

|                             |   |
|-----------------------------|---|
| PHYSICS .....               | 1 |
| CHEMISTRY .....             | 2 |
| PHYSIOLOGY / MEDECINE ..... | 3 |
| LITERATURE .....            | 4 |
| ECONOMY .....               | 5 |
| MATHEMATICS (Fields) .....  | 5 |

## PHYSICS

### Occidental / Judeo-christian (198)

Alekseï Abrikossov / Zhores Alferov / Hannes Alfvén / Eric Allin Cornell / Luis Walter Alvarez / Carl David Anderson / Philip Warren Anderson / Edward Victor Appleton / Arthur Ashkin / John Bardeen / Barry C. Barish / Nikolay Basov / Henri Becquerel / Johannes Georg Bednorz / Hans Bethe / Gerd Binnig / Patrick Blackett / Felix Bloch / Nicolaas Bloembergen / Aage Bohr / Niels Bohr / Max Born / Walther Bothe / Willard S. Boyle / William Henry Bragg / William Lawrence Bragg / Karl Ferdinand Braun / Percy Williams Bridgman / Bertram Brockhouse / James Chadwick / Owen Chamberlain / Subrahmanyam Chandrasekhar / Georges Charpak / Pavel Cherenkov / Steven Chu / Claude Cohen-Tannoudji / John Cockcroft / Robert Coleman Richardson / Arthur Compton / Leon Cooper / James Cronin / Marie Curie / Pierre Curie / Gustaf Dalén / Raymond Davis Jr / Clinton Davisson / Louis de Broglie / Hans Georg Dehmelt / Johannes Diderik van der Waals / Paul Dirac / Albert Einstein / François Englert / Leo Esaki / Enrico Fermi / Albert Fert / Richard Feynman / William Alfred Fowler / James Franck / Ilya Frank / Jerome Isaac Friedman / Dennis Gabor / Andre Geim / Murray Gell-Mann / Pierre-Gilles de Gennes / Riccardo Giacconi / Ivar Giaever / Vitaly Ginzburg / Donald A. Glaser / Sheldon Lee Glashow / Roy J. Glauber / Charles Glover Barkla / Maria Goeppert-Mayer / David Gross / Peter Grünberg / Charles Édouard Guillaume / Duncan Haldane / John L. Hall / Theodor W. Hänsch / Serge Haroche / Werner Heisenberg / Gustav Ludwig Hertz / Victor Francis Hess / Antony Hewish / John Hasbrouck Van Vleck / Peter W. Higgs / Robert Hofstadter / Gerard 't Hooft / Joseph Hooton Taylor / Walter Houser

Brattain / Russell Alan Hulse / J. Hans D. Jensen / Brian David Josephson / Charles K. Kao / Wolfgang Ketterle / John M. Kosterlitz / Ernest Lawrence / Leon M. Lederman / John C. Mather / Karl Alexander Müller / Heike Kamerlingh Onnes / Pyotr Kapitsa / Alfred Kastler / Jack Kilby / Herbert Kroemer / Polykarp Kusch / Willis Lamb / Lev Landau / Robert B. Laughlin / Anthony James Leggett / Philipp Lenard / Gabriel Lippmann / Val Logsdon Fitch / Hendrik Lorentz / Arthur B. McDonald / Guglielmo Marconi / Michel Mayor / Albert Abraham Michelson / Robert Andrews Millikan / David Morris Lee / Nevill Francis Mott / Gérard Mourou / Douglas Osheroff / Wolfgang Paul / James Peebles / Martin Lewis Perl / Saul Perlmutter / William Daniel Phillips / Edward Mills Purcell / Ben Roy Mottelson / Rudolf Mössbauer / Louis Néel / Konstantin Novoselov / George Paget Thomson / Wolfgang Pauli / Arno Allan Penzias / Jean Baptiste Perrin / Max Planck / Hugh David Politzer / Cecil Frank Powell / Alexandre Mikhaïlovitch Prokhorov / Didier Queloz / Isidor Isaac Rabi / James Rainwater / Norman Foster Ramsey / Lord Rayleigh / Frederick Reines / Owen Willans Richardson / Burton Richter / Adam G. Riess / Heinrich Rohrer / Wilhelm Röntgen / Carlo Rubbia / Ernst Ruska / Martin Ryle / Arthur Leonard Schawlow / Brian Schmidt / John Robert Schrieffer / Erwin Schrödinger / Melvin Schwartz / Julian Schwinger / Emilio G. Segrè / William Shockley / Clifford Shull / Manne Siegbahn / Kai Siegbahn / George E. Smith / George Smoot / Johannes Stark / Jack Steinberger / Otto Stern / Horst Ludwig Störmer / Donna Strickland / Igor Tamm / Richard E. Taylor / Joseph John Thomson / Kip Thorne / David J. Thouless / Samuel C. C. Ting / Charles Thomson Rees Wilson / Charles Hard Townes / Daniel C. Tsui / Simon van der Meer / Martinus Veltman / Klaus von Klitzing / Max von Laue / Ernest Walton / Henry Way Kendall / Steven Weinberg / Rainer Weiss / Wilhelm Wien / Carl Wieman / Eugene Wigner / Frank Wilczek / Kenneth G. Wilson / Robert Woodrow Wilson / David J. Wineland / Pieter Zeeman / Frederik Zernike

## Asian (14)

Isamu Akasaki / Hiroshi Amano / Takaaki Kajita / Makoto Kobayashi / Masatoshi Koshihira / Tsung-Dao Lee / Toshihide Maskawa / Shuji Nakamura / Chen Ning Yang / Ryōji Noyori / Yoichiro Nambu / Koichi Tanaka / Sin-Itiro Tomonaga / Hideki Yukawa

## Indian (2)

C. V. Raman / Abdus Salam

## Muslim arabic (0)

## Black african (0)

# CHEMISTRY

## Occidental / Judeo-christian (167)

Peter Agre / Kurt Alder / Sidney Altman / Christian B. Anfinsen / Frances Arnold / Svante Arrhenius / Francis William Aston / Karl Barry Sharpless / Derek Barton / Paul Berg / Friedrich Bergius / Eric Betzig / Carl Bosch / Paul D. Boyer / Herbert C. Brown / Eduard Buchner / Adolf Butenandt / Melvin Calvin / Thomas Cech / Martin Chalfie / Yves Chauvin / Aaron Ciechanover / Elias James Corey / John Cornforth / Donald J. Cram / Paul J. Crutzen / Marie Curie / Robert F. Curl Jr. / Peter Deybe / Johann Deisenhofer / Otto Diels / Jacques Dubochet / Manfred Eigen / Richard R. Ernst / Gerhard Ertl / John Fenn / Ben Feringa / Ernst Otto Fischer / Emil Fischer / Hans Fischer / Paul Flory / Joachim Frank / James Fraser Stoddart / William Giaque / Walter Gilbert / John B. Goodenough / Victor Grignard / Robert H. Grubbs / Fritz Haber / Otto Hahn / Arthur Harden / Odd Hassel / Herbert A. Hauptman / Norman Haworth / Richard F. Heck / Alan J. Heeger / Stefan Hell / Richard Henderson / Dudley R. Herschbach / Avram Hershko / Gerhard Herzberg / George de Hevesy / Jaroslav Heyrovský / Cyril Norman Hinshelwood / Dorothy Hodgkin / Robert Huber / Frédéric Joliot-Curie / Irène Joliot-Curie / Jerome Karle / Martin Karplus / Paul Karrer / John Kendrew / Brian K. Kobilka / Walter Kohn / Roger D. Kornberg / Harry Kroto / Richard Kuhn / Irving Langmuir / Robert J. Lefkowitz / Jean-Marie Lehn / Luis Federico Leloir / Michael Levitt / Willard Libby / Tomas Lindahl / William Lipscomb / Alan MacDiarmid / Roderick MacKinnon / Edwin McMillan / Rudolph A. Marcus / Robert Bruce Merrifield / Hartmut Michel / Richard Laurence Millington Synge / Peter D. Mitchell / Paul L. Modrich / William Moerner / Henri Moissan / Mario J. Molina / Stanford Moore / Robert S. Mulliken / Kary Mullis / Giulio Natta / Walther Nernst / Ronald George Wreyford Norrish / John Howard Northrop / George Andrew Olah / Lars Onsager /

Wilhelm Ostwald / Linus Pauling / Charles J. Pedersen / John Polanyi / George Porter / Archer John Porter Martin / Max Perutz / John Pople / Fritz Pregl / Ilya Prigogine / William Ramsay / Adolf Otto Reinhold Windaus / Theodore William Richards / Robert Robinson / Irwin Rose / Ernest Rutherford / Lavoslav Ružička / Paul Sabatier / Frederick Sanger / Jean-Pierre Sauvage / Glenn T. Seaborg / Dan Shechtman / Nikolai Semionov / Richard R. Schrock / Frank Sherwood Rowland / Jens Christian Skou / George Smith / Michael Smith / Richard Smalley / Frederick Soddy / William Standish Knowles / Wendell Meredith Stanley / Hermann Staudinger / William Howard Stein / Thomas A. Steitz / James B. Sumner / Theodor Svedberg / Henry Taube / Arne Tiselius / Alexander Robert Todd / Roger Y. Tsien / Harold Urey / Jacobus Henricus van 't Hoff / Vincent du Vigneaud / Artturi Ilmari Virtanen / Adolf von Baeyer / Hans von Euler-Chelpin / Arieh Warshel / John E. Walker / Otto Wallach / Alfred Werner / Stanley Whittingham / Heinrich Otto Wieland / Geoffrey Wilkinson / Gregory Winter / Georg Wittig / Robert Burns Woodward / Kurt Wüthrich / Ada Yonath / Karl Ziegler / Richard Adolf Zsigmondy

## Asian (6)

Yuan T. Lee / Ei-ichi Negishi / Osamu Shimomura / Hideki Shirakawa / Akira Suzuki / Akira Yoshino

## Indian (1)

Venkatraman Ramakrishnan

## Muslim arabic (2)

Aziz Sancar / Ahmed Zewail

## Black african (0)

# PHYSIOLOGY / MEDECINE

## Occidental / Judeo-christian (215)

Edgar Adrian / James Allison / Werner Arber / Richard Axel / Julius Axelrod / David Baltimore / Frederick Banting / Robert Bárány / Françoise Barré-Sinoussi / Baruj Benacerraf / Sune Bergström / Bruce Beutler / J. Michael Bishop / James W. Black / Elizabeth Blackburn / Günter Blobel / Konrad Emil Bloch / Jules Bordet / Daniel Bovet / Sydney Brenner / Charles Brenton Huggins / Baruch Samuel Blumberg / Michael Stuart Brown / Linda B. Buck / William C. Campbell / Mario Capecchi / Arvid Carlsson / John Carew Eccles / Alexis Carrel / Ernst Boris Chain / Frederick Chapman Robbins / Stanley Cohen / Albert Claude / Carl Ferdinand Cori / Gerty Cori / André Frédéric Cournand / Francis Crick / Henrik Dam / Jean Dausset / Max Delbrück / Peter C. Doherty / Edward Adelbert Doisy / Gerhard Domagk / Renato Dulbecco / Christian de Duve / Gerald Edelman / Gertrude B. Elion / Paul Ehrlich / Christiaan Eijkman / Willem Einthoven / John Franklin Enders / Joseph Erlanger / Robert G. Edwards / Martin Evans / Johannes Fibiger / Andrew Fire / Edmond H. Fischer / Alexander Fleming / Howard Florey / Werner Forssmann / Robert F. Furchgott / Daniel Carleton Gajdusek / Herbert Spencer Gasser / Alfred G. Gilman / Joseph L. Goldstein / Camillo Golgi / Paul Greengard / Frederick Gowland Hopkins / Ragnar Granit / Carol W. Greider / Roger Guillemin / Allvar Gullstrand / John B. Gurdon / Jeffrey C. Hall / Henry Hallett Dale / Haldan Keffer Hartline / Leland H. Hartwell / Alfred Hershey / Walter Rudolf Hess / Corneille Heymans / Archibald Hill / George H. Hitchings / Jules A. Hoffmann / Roald Hoffmann / Robert W. Holley / H. Robert Horvitz / Godfrey Hounsfield / Bernardo Houssay / David H. Hubel / Thomas Huckle Weller / Tim Hunt / Andrew Huxley / Louis Ignarro / François Jacob / William Kaelin Jr. / Niels Kaj Jerne / Bernard Katz / Eric Kandel / Edward Calvin Kendall / Aaron Klug / Robert Koch / Emil Theodor Kocher / Georges J. F. Köhler / Feodor Felix Konrad Lynen / Arthur Kornberg / Albrecht Kossel / Edwin G. Krebs / Hans Adolf Krebs / August Krogh / Karl Landsteiner / Paul Lauterbur / Charles Louis Alphonse Laveran / Joshua Lederberg / Rita Levi-Montalcini / Edward B. Lewis / Fritz Albert Lipmann / Alan Lloyd Hodgkin / Otto Loewi / Konrad Lorenz / Salvador Luria / / Allan McLeod Cormack / André Michel Lwoff / Frank Macfarlane Burnet / Barbara McClintock / Peter Mansfield / Barry Marshall / Peter Medawar / Craig Mello / Élie Metchnikoff / Otto Fritz Meyerhof / César Milstein / George Minot / António Egas Moniz / Jacques Monod / Luc Montagnier / Thomas Hunt Morgan / Edvard Moser / May-Britt Moser / Hermann Joseph Muller / Paul Hermann Müller / Ferid Murad / William Murphy / Joseph Murray / Daniel Nathans / Erwin Neher / Charles Nicolle / Marshall Warren Nirenberg / Paul Nurse /

Christiane Nüsslein-Volhard / Severo Ochoa / John O'Keefe / George Emil Palade / Ivan Pavlov / Rodney Robert Porter / Stanley B. Prusiner / Santiago Ramón y Cajal / Sir Peter J. Ratcliffe / Tadeusz Reichstein / Charles Richet / John James Rickard Macleod / Dickinson W. Richards / Richard J. Roberts / Martin Rodbell / Ronald Ross / Francis Peyton Rous / Niels Ryberg Finsen / James E. Rothman / Michael Rosbash / Bengt I. Samuelsson / Bert Sakmann / Andrew Schally / Randy W. Schekman / Gregg L. Semenza / Phillip Allen Sharp / Charles Scott Sherrington / Philip Showalter Hench / Hamilton O. Smith / Oliver Smithies / George Davis Snell / Hans Spemann / Ralph M. Steinman / Thomas C. Südhof / John Sulston / Jack W. Szostak / Rosalyn Sussman Yalow / Albert Szent-Györgyi / Edward Lawrie Tatum / Howard Martin Temin / Max Theiler / Hugo Theorell / Nikolaas Tinbergen / John Vane / Harold E. Varmus / Emil Adolf von Behring / Georg von Békésy / Ulf von Euler / Karl von Frisch / Julius Wagner-Jauregg / Selman Waksman / George Wald / Otto Heinrich Warburg / Robin Warren / James D. Watson / George Wells Beadle / George Whipple / Eric F. Wieschaus / Torsten Wiesel / Earl Wilbur Sutherland, Jr. / Maurice Wilkins / Richard Willstätter / Roger Wolcott Sperry / Michael W. Young / Rolf M. Zinkernagel / Harald zur Hausen

## Asian (7)

Kenichi Fukui / Tasuku Honjo / Yoshinori Ohsumi / Satoshi Ōmura / Susumu Tonegawa / Shinya Yamanaka / Tu Youyou

## Indian (1)

Har Gobind Khorana

## Muslim arabic (0)

## Black african (0)

## LITERATURE

### Occidental / Judeo-christian (110)

Shmuel Yosef Agnon / Vicente Aleixandre / Svetlana Aleksievitch / Ivo Andrić / Miguel Ángel Asturias / Samuel Beckett / Saul Bellow / Jacinto Benavente / Henri Bergson / Bjørnstjerne Bjørnson / Heinrich Böll / Ivan Bounine / Joseph Brodsky / Pearl S. Buck / Albert Camus / Elias Canetti / Giosuè Carducci / Camilo José Cela / Mikhaïl Cholokhov / Winston Churchill / J. M. Coetzee / Grazia Deledda / E. Donnall Thomas / Bob Dylan / José Echegaray / T. S. Eliot / Odysseas Elytis / Rudolf Christoph Eucken / William Faulkner / Dario Fo / Anatole France / John Galsworthy / Gabriel García Márquez / André Gide / Karl Adolph Gjellerup / William Golding / Nadine Gordimer / Günter Grass / Knut Hamsun / Peter Handke / Gerhart Hauptmann / Ernest Hemingway / Seamus Heaney / Hermann Hesse / Paul Heyse / Elfriede Jelinek / Johannes Vilhelm Jensen / Juan Ramón Jiménez / Eyvind Johnson / Erik Axel Karlfeldt / Imre Kertész / Rudyard Kipling / Pär Lagerkvist / Selma Lagerlöf / Halldór Laxness / J. M. G. Le Clézio / Doris Lessing / Sinclair Lewis / Mario Vargas Llosa / Maurice Maeterlinck / Thomas Mann / Roger Martin du Gard / Harry Martinson / François Mauriac / Czesław Miłosz / Frédéric Mistral / Gabriela Mistral / Patrick Modiano / Theodor Mommsen / Eugenio Montale / Toni Morrison / Herta Müller / Alice Munro / V. S. Naipaul / Pablo Neruda / Eugene O'Neill / Orhan Pamuk / Boris Pasternak / Octavio Paz / Harold Pinter / Luigi Pirandello / Henrik Pontoppidan / Sully Prudhomme / Salvatore Quasimodo / Władysław Reymont / Romain Rolland / Bertrand Russell / Nelly Sachs / Saint-John Perse / José Saramago / Jean-Paul Sartre / Giorgos Seferis / Jaroslav Seifert / George Bernard Shaw / Henryk Sienkiewicz / Frans Eemil Sillanpää / Claude Simon / Isaac Bashevis Singer / Aleksandr Solzhenitsyn / Wole Soyinka / Carl Spitteler / John Steinbeck / Wisława Szymborska / Olga Tokarczuk / Tomas Tranströmer / Sigrid Undset / Verner von Heidenstam / Derek Walcott / Patrick White / W. B. Yeats

## Asian (5)

Kazuo Ishiguro / Yasunari Kawabata / Kenzaburō Ōe / Gao Xingjian / Mo Yan

## Indian (2)

Amartya Sen / Rabindranath Tagore

## Muslim arabic (1)

Naguib Mahfouz

## Black african (0)

# ECONOMY

## Occidental / Judeo-christian (82)

George Akerlof / Maurice Allais / Kenneth Arrow / Robert Aumann / Gary Becker / James M. Buchanan / Ronald Coase / Angus Deaton / Gérard Debreu / Peter A. Diamond / Esther Duflo / Robert F. Engle / Eugene F. Fama / Robert Fogel / John Forbes Nash / William Forsyth Sharpe / Milton Friedman / Ragnar Frisch / Clive Granger / Trygve Haavelmo / Lars Peter Hansen / John Harsanyi / Oliver Hart / Friedrich Hayek / James Heckman / John Hicks / Bengt Holmström / Leonid Hurwicz / Daniel Kahneman / Leonid Kantorovich / Lawrence Klein / Tjalling Koopmans / Michael Kremer / Paul Krugman / Simon Kuznets / Finn E. Kydland / Wassily Leontief / Arthur Lewis / Robert Lucas, Jr. / Daniel McFadden / Harry Markowitz / Eric Maskin / James Meade / Robert C. Merton / Merton Miller / James Mirrlees / Franco Modigliani / Dale T. Mortensen / Robert Mundell / Roger Myerson / Gunnar Myrdal / William Nordhaus / Douglass North / Bertil Ohlin / Elinor Ostrom / Edmund Phelps / Christopher A. Pissarides / Edward C. Prescott / Paul Romer / Alvin E. Roth / Paul Samuelson / Thomas J. Sargent / Thomas Schelling / Myron Scholes / Theodore Schultz / Reinhard Selten / Lloyd S. Shapley / Robert J. Shiller / Christopher A. Sims / Herbert A. Simon / Vernon L. Smith / Robert Solow / Michael Spence / George Stigler / Joseph Stiglitz / Richard Stone / Richard Thaler / Jan Tinbergen / Jean Tirole / James Tobin / William Vickrey / Oliver E. Williamson

## Asian (0)

## Indian (1)

Abhijit Banerjee

## Muslim arabic (0)

## Black african (0)

# MATHEMATICS (Fields)

## Occidental / Judeo-christian (53)

Lars Valerian Ahlfors / Michael Atiyah / Artur Ávila / Alan Baker / Manjul Bhargava / Enrico Bombieri / Richard Ewen Borcherds / Jean Bourgain / Paul Cohen / Alain Connes / Pierre Deligne / Simon Donaldson / Jesse Douglas / Vladimir Drinfeld / Gerd Faltings / Charles Fefferman / Alessio Figalli / Michael Freedman / Timothy Gowers / John Griggs Thompson / Alexandre Grothendieck / Martin Hairer / Lars Hörmander / Vaughan Jones / Maxime Kontsevitch / Laurent Lafforgue / Elon Lindenstrauss / Pierre-Louis Lions / Curtis Tracy McMullen / Gregori Margulis / John Milnor / David Mumford / Andreï Okounkov / Daniel Quillen / Sergueï Novikov / Grigori Perelman / Klaus Roth / Peter Scholze / Laurent Schwartz / Atle Selberg / Jean-Pierre Serre / Stephen Smale / Stanislav Smirnov / Terence Tao / René Thom / William Thurston / Akshay Venkatesh / Cédric Villani / Vladimir Voïevodski / Wendelin Werner / Edward Witten / Jean-Christophe Yoccoz / Efim Zelmanov

## **Asian (5)**

Ngô Bảo Châu / Heisuke Hironaka / Kunihiko Kodaira / Shigefumi Mori / Shing-Tung Yaue

## **Indian (0)**

## **Muslim arabic (2)**

Caucher Birkar / Maryam Mirzakhani

## **Black african (0)**