

# Great Precursors, Creators and Propagators of Relativity

**Zbigniew Osiak**

**Margaret Osiak**

zbigniew.osiak@gmail.com

margaret.osiak@gmail.com

## Abstract

We presented a poster containing 126 portraits of great precursors, creators and propagators of the theory of relativity.

## Introduction

In 2005, almost 20 years ago, we took an active part in the celebration of the hundredth anniversary of the Theory of Relativity. As part of the Science Festival, we prepared, among others, the poster "Great Precursors, Creators and Propagators of Relativity".

The poster measures 140 cm by 100 cm. The format forced the form: 126 portraits, each measuring 7 cm by 9.9 cm. The portraits are arranged in chronological order. In the center there are: on the left a portrait of Copernicus (A4), on the right a portrait of Einstein (A4), with inscriptions between them.

Portraits of relativists were made by Margaret Osiak. The poster was presented for the first time in 2005.

We have included chronological and alphabetical lists of the 126 presented portraits.

**CHRONOLOGICAL LIST OF PORTRAITS**

**COPERNICUS**, Nicolaus (1473-1543)  
**BRUNO**, Giordano (1548-1600)  
**GALILEI**, Galileo (1564-1642)  
**KEPLER**, Johannes (1571-1630)  
**DESCARTES**, René du Perron (1596-1650)  
**NEWTON**, Sir Isaac (1642-1727)  
**RØMER**, Ole (Olaus) Christiansen (1644-1710)  
**BRADLEY**, James (1693-1762)  
**EULER**, Leonhard (1707-1783)  
**LAGRANGE**, Joseph Louis de (1736-1813)  
**OLBERS**, Heinrich Wilhelm Matthias (1758-1840)  
**YOUNG**, Tomas (1773-1829)  
**GAUSS**, Carl Friedrich (1777-1855)  
**POISSON**, Siméon Denis (1781-1840)  
**ARAGO**, Dominique François Jean (1786-1853)  
**FRESNEL**, Augustyn Jean (1788-1827)  
**CAUCHY**, Baron Augustin Louis (1789-1857)  
**FARADAY**, Michael (1791-1867)  
**CORIOLIS**, Gaspard Gustave de (1792-1843)  
**LOBACHEVSKY**, Nikolai Ivanovich (1793-1856)  
**DOPPLER**, Christian Johann (1803-1853)  
**HAMILTON**, Sir William Rowan (1805-1865)  
**FIZEAU**, [Armand] Hippolyte Louis (1819-1896)  
**FOUCAULT**, Jean Bernard Léon (1819-1868)  
**RIEMANN**, Georg Friedrich Bernhard (1826-1866)  
**CHRISTOFFEL**, Elwin Bruno (1829-1900)  
**MAXWELL**, James Clerk (1831-1879)  
**MACH**, Ernst (1838-1916)  
**MORLEY**, Edward Williams (1838-1923)  
**LIE**, Marius Sophus (1842-1899)

**RAYLEIGH**, John William Strutt (1842-1919)  
**EÖTVÖS**, Baron Roland von (1848-1919)  
**KLEIN**, Felix Christian (1849-1925)  
**VOIGT**, Woldemar (1850-1919)  
**FITZGERALD**, George Francis (1851-1901)  
**MICHELSON**, Albert Abraham (1852-1931)  
**LORENTZ**, Hendrik Antoon (1853-1928)  
**RICCI-CURBASTRO**, Gregorio (1853-1925)  
**POINCARÉ**, (Jules) Henri (1854-1912)  
**BIANCHI**, Luigi (1856-1928)  
**LARMOR**, Joseph (1857-1942)  
**HERTZ**, Heinrich Rudolf (1857-1894)  
**PLANCK**, Max Karl Ernst Ludwig (1858-1947)  
**HILBERT**, David (1862-1943)  
**MINKOWSKI**, Hermann (1864-1909)  
**ZEEMAN**, Pieter (1865-1943)  
**CARTAN**, Élie Joseph (1869-1951)  
**LANGEVIN**, Paul (1872-1946)  
**SITTER**, Willem de (1872-1934)  
**LEVI-CIVITA**, Tulio (1873-1941)  
**SCHWARZSCHILD**, Carl (1873-1916)  
**BIALOBRZESKI**, Czeslaw (1878-1953)  
**GROSSMANN**, Marcell (1878-1936)  
**EINSTEIN**, Albert (1879-1955)  
**LAUE**, Max von (1879-1960)  
**MANDELSHTAM**, Leonid Isaakovich (1879-1944)  
**EHRENFEST**, Paul (1880-1933)  
**NORDSTRÖM**, Gunnar (1881-1923)  
**TOLMAN**, Richard Chase (1881-1948)  
**BORN**, Max (1882-1970)  
**EDDINGTON**, Sir Arthur Stanley (1882-1944)  
**NOETHER**, Amalie Emmy (1882-1935)

**LORIA**, Stanislaw (1883-1958)  
**KALUZA**, Theodor Franz Eduard (1885-1954)  
**WEYL**, Hermann Claus Hugo (1885-1955)  
**FOKKER**, Adriaan Daniël (1887-1972)  
**SCHRÖDINGER**, Erwin (1887-1961)  
**FRIEDMAN**, Aleksander Aleksandrovich (1888-1925)  
**BRILLOUIN**, Léon (1889-1969)  
**HUBBLE**, Edwin Powell (1889-1953)  
**KLEIN**, Oscar Benjamin (1894-1977)  
**LEMAÎTRE**, Georges Henri Joseph Edouard (1894-1966)  
**SYNGE**, John Lighton (1897-1995)  
**FOCK**, Vladimir Aleksandrovich (1898-1974)  
**INFELD**, Leopold (1898-1968)  
**PAULI**, Wolfgang (1900-1958)  
**DIRAC**, Paul Adrien Maurice (1902-1984)  
**WIGNER**, Eugene Paul (1902-1995)  
**ROBERTSON**, Howard Percy (1903-1961)  
**MC CREA**, Sir William Hunter (1904-1998)  
**MØLLER**, Christian (1904-1980)  
**OPPENHEIMER**, J. Robert (1904-1967)  
**BETHE**, Hans Albrecht (1906-2005)  
**GÖDEL**, Kurt (1906-1978)  
**LANDAU**, Lev Davidovich (1908-1968)  
**WEISSKOPF**, Victor Frederick (1908-2002)  
**WALKER**, Arthur Geoffrey (1909-2001)  
**CHANDRASEKHAR**, Subrahmayan (1910-1995)  
**PETROV**, Aleksey Zinovyevich (1910-1972)  
**FOWLER**, William Alfred (1911-1995)  
**SZEKERES**, George (1911-2005)  
**WHEELER**, John Archibald (1911-2008)  
**SNYDER**, Hartland Sweet (1913-1962)  
**ZELDOVICH**, Yakov Borisovich (1914-1987)

**BERGMANN**, Peter Gabriel (1915-2002)  
**HOYLE**, Fred (1915-2001)  
**LICHNEROWICZ**, André (1915-1998)  
**LIFSHITZ**, Evgeny Mikhailovich (1915-1985)  
**DICKE**, Robert Henry (1916-1997)  
**GINZBURG**, Vitaly, Lazarevich (1916-2009)  
**RYLE**, Sir Martin (1918-1984)  
**BONDI**, Sir Hermann (1919-2005)  
**KHALATNIKOV**, Isaak Markowich (1919-2021)  
**POUND**, Robert Vivian (1919-2010)  
**WEBER**, Joseph (1919-2000)  
**SAKHAROV**, Andrei Dmitrievich (1921-1989)  
**HEWISH**, Antony (1924-2021)  
**KRUSKAL**, Martin David (1925-2006)  
**SALAM**, Abdus (1926-1996)  
**SCIAMA**, Dennis William (1926-1999)  
**PENROSE**, Sir Roger (1931- )  
**GLASHOW**, Sheldon Lee (1932- )  
**MISNER**, Charles William (1932-2023)  
**PENZIAS**, Arno Allan (1933-2024)  
**TRAUTMAN**, Andrzej (1933- )  
**WEINBERG**, Steven (1933-2021)  
**KERR**, Roy Patrick (1934- )  
**NOVIKOV**, Igor Dmitriyevich (1935- )  
**WILSON**, Robert Woodrow (1936- )  
**THORNE**, Kip Stephen. (1940- )  
**TAYLOR**, Joseph Hooton (1941- )  
**HAWKING**, Stephen William (1942-2018)  
**GUTH**, Alan Harvey (1947- )  
**HULSE**, Russell Alan (1950- )  
**WITTEN**, Edward (1951- )  
**MAZUR**, Pawel O. (1954- )

**ALPHABETICAL LIST OF PORTRAITS**

**ARAGO**, Dominique François Jean (1786-1853)  
**BERGMANN**, Peter Gabriel (1915-2002)  
**BETHE**, Hans Albrecht (1906-2005)  
**BIALOBRZESKI**, Czeslaw (1878-1953)  
**BIANCHI**, Luigi (1856-1928)  
**BONDI**, Sir Hermann (1919-2005)  
**BORN**, Max (1882-1970)  
**BRADLEY**, James (1693-1762)  
**BRILLOUIN**, Léon (1889-1969)  
**BRUNO**, Giordano (1548-1600)  
**CARTAN**, Élie Joseph (1869-1951)  
**CAUCHY**, Baron Augustin Louis (1789-1857)  
**CHANDRASEKHAR**, Subrahmayan (1910-1995)  
**CHRISTOFFEL**, Elwin Bruno (1829-1900)  
**COPERNICUS**, Nicolaus (1473-1543)  
**CORIOLIS**, Gaspard Gustave de (1792-1843)  
**DESCARTES**, René du Perron (1596-1650)  
**DICKE**, Robert Henry (1916-1997)  
**DIRAC**, Paul Adrien Maurice (1902-1984)  
**DOPPLER**, Christian Johann (1803-1853)  
**EDDINGTON**, Sir Arthur Stanley (1882-1944)  
**EHRENFEST**, Paul (1880-1933)  
**EINSTEIN**, Albert (1879-1955)  
**EÖTVÖS**, Baron Roland von (1848-1919)  
**EULER**, Leonhard (1707-1783)  
**FARADAY**, Michael (1791-1867)  
**FITZGERALD**, George Francis (1851-1901)  
**FIZEAU**, [Armand] Hippolyte Louis (1819-1896)  
**FOCK**, Vladimir Aleksandrovich (1898-1974)  
**FOKKER**, Adriaan Daniël (1887-1972)

**FOUCAULT**, Jean Bernard Léon (1819-1868)  
**FOWLER**, William Alfred (1911-1995)  
**FRESNEL**, Augustyn Jean (1788-1827)  
**FRIEDMAN**, Aleksander Aleksandrovich (1888-1925)  
**GALILEI**, Galileo (1564-1642)  
**GAUSS**, Carl Friedrich (1777-1855)  
**GINZBURG**, Vitaly, Lazarevich (1916-2009)  
**GLASHOW**, Sheldon Lee (1932- )  
**GÖDEL**, Kurt (1906-1978)  
**GROSSMANN**, Marcell (1878-1936)  
**GUTH**, Alan Harvey (1947- )  
**HAMILTON**, Sir William Rowan (1805-1865)  
**HAWKING**, Stephen William (1942-2018)  
**HERTZ**, Heinrich Rudolf (1857-1894)  
**HEWISH**, Antony (1924-2021)  
**HILBERT**, David (1862-1943)  
**HOYLE**, Fred (1915-2001)  
**HUBBLE**, Edwin Powell (1889-1953)  
**HULSE**, Russell Alan (1950- )  
**INFELD**, Leopold (1898-1968)  
**KALUZA**, Theodor Franz Eduard (1885-1954)  
**KEPLER**, Johannes (1571-1630)  
**KERR**, Roy Patrick (1934- )  
**KHALATNIKOV**, Isaak Markowich (1919-2021)  
**KLEIN**, Felix Christian (1849-1925)  
**KLEIN**, Oscar Benjamin (1894-1977)  
**KRUSKAL**, Martin David (1925-2006)  
**LAGRANGE**, Joseph Louis de (1736-1813)  
**LANDAU**, Lev Davidovich (1908-1968)  
**LANGEVIN**, Paul (1872-1946)  
**LARMOR**, Joseph (1857-1942)  
**LAUE**, Max von (1879-1960)

**LEMAÎTRE**, Georges Henri Joseph Edouard (1894-1966)  
**LEVI-CIVITA**, Tullio (1873-1941)  
**LICHNEROWICZ**, André (1915-1998)  
**LIE**, Marius Sophus (1842-1899)  
**LIFSHITZ**, Evgeny Mikhailovich (1915-1985)  
**LOBACHEVSKY**, Nikolai Ivanovich (1793-1856)  
**LORENTZ**, Hendrik Antoon (1853-1928)  
**LORIA**, Stanislaw (1883-1958)  
**MACH**, Ernst (1838-1916)  
**MANDELSHTAM**, Leonid Isaakovich (1879-1944)  
**MAXWELL**, James Clerk (1831-1879)  
**MAZUR**, Pawel O. (1954- )  
**MC CREA**, Sir William Hunter (1904-1998)  
**MICHELSON**, Albert Abraham (1852-1931)  
**MINKOWSKI**, Hermann (1864-1909)  
**MISNER**, Charles William (1932-2023)  
**MØLLER**, Christian (1904-1980)  
**MORLEY**, Edward Williams (1838-1923)  
**NEWTON**, Sir Isaac (1642-1727)  
**NOETHER**, Amalie Emmy (1882-1935)  
**NORDSTRÖM**, Gunnar (1881-1923)  
**NOVIKOV**, Igor Dmitriyevich (1935- )  
**OLBERS**, Heinrich Wilhelm Matthias (1758-1840)  
**OPPENHEIMER**, J. Robert (1904-1967)  
**PAULI**, Wolfgang (1900-1958)  
**PENROSE**, Sir Roger (1931- )  
**PENZIAS**, Arno Allan (1933-2024)  
**PETROV**, Aleksey Zinovyevich (1910-1972)  
**PLANCK**, Max Karl Ernst Ludwig (1858-1947)  
**POINCARÉ**, (Jules) Henri (1854-1912)  
**POISSON**, Siméon Denis (1781-1840)  
**POUND**, Robert Vivian (1919-2010)



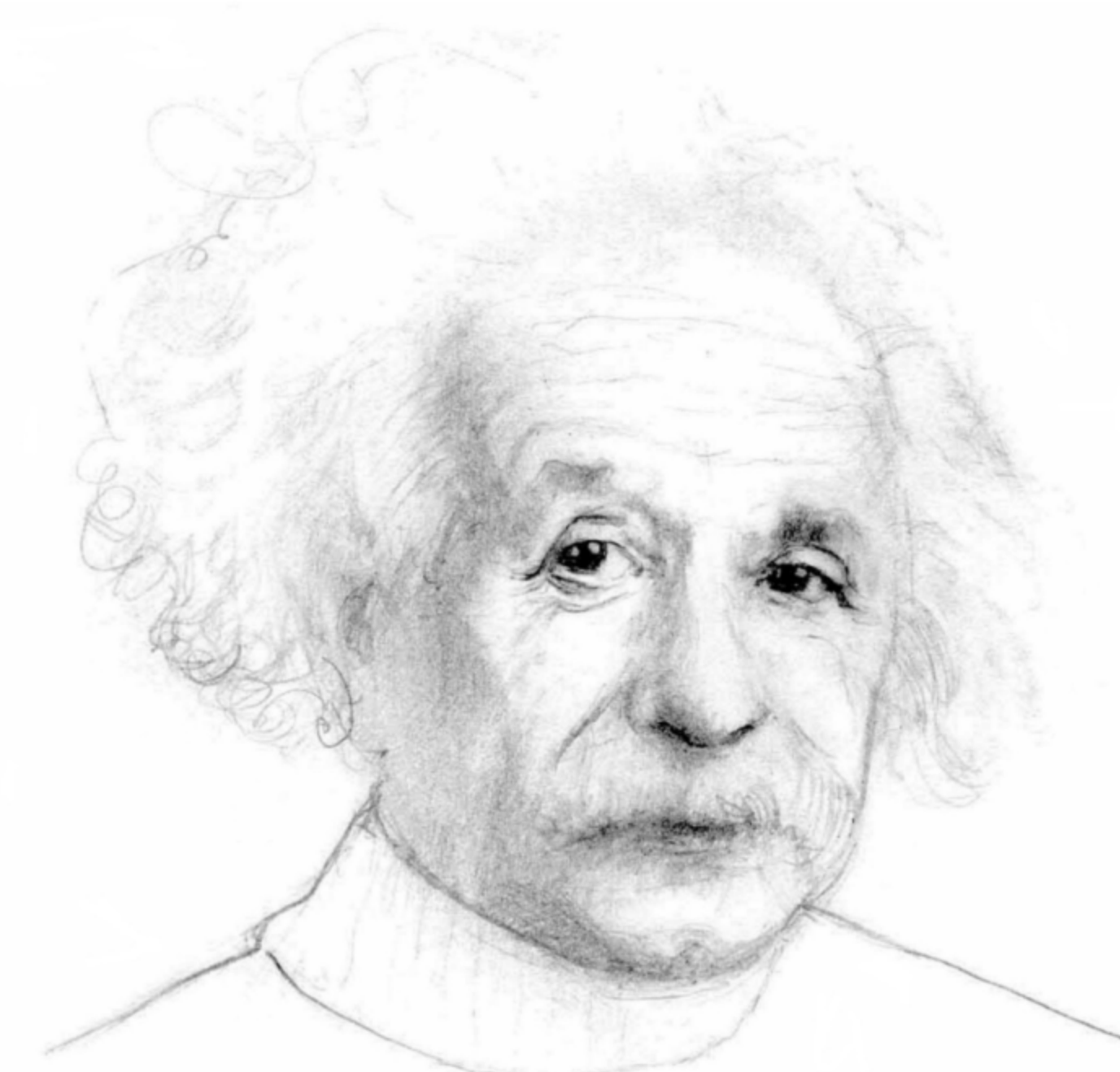
**RAYLEIGH**, John William Strutt (1842-1919)  
**RICCI-CURBASTRO**, Gregorio (1853-1925)  
**RIEMANN**, Georg Friedrich Bernhard (1826-1866)  
**ROBERTSON**, Howard Percy (1903-1961)  
**RØMER**, Ole (Olaus) Christiansen (1644-1710)  
**RYLE**, Sir Martin (1918-1984)  
**SAKHAROV**, Andrei Dmitrievich (1921-1989)  
**SALAM**, Abdus (1926-1996)  
**SCHRÖDINGER**, Erwin (1887-1961)  
**SCHWARZSCHILD**, Carl (1873-1916)  
**SCIAMA**, Dennis William (1926-1999)  
**SITTER**, Willem de (1872-1934)  
**SNYDER**, Hartland Sweet (1913-1962)  
**SYNGE**, John Lighton (1897-1995)  
**SZEKERES**, George (1911-2005)  
**TAYLOR**, Joseph Hooton (1941- )  
**THORNE**, Kip Stephen. (1940- )  
**TOLMAN**, Richard Chase (1881-1948)  
**TRAUTMAN**, Andrzej (1933- )  
**VOIGT**, Woldemar (1850-1919)  
**WALKER**, Arthur Geoffrey (1909-2001)  
**WEBER**, Joseph (1919-2000)  
**WEINBERG**, Steven (1933-2021)  
**WEISSKOPF**, Victor Frederick (1908-2002)  
**WEYL**, Hermann Claus Hugo (1885-1955)  
**WHEELER**, John Archibald (1911-2008)  
**WIGNER**, Eugene Paul (1902-1995)  
**WILSON**, Robert Woodrow (1936- )  
**WITTEN**, Edward (1951- )  
**YOUNG**, Tomas (1773-1829)  
**ZEEMAN**, Pieter (1865-1943)  
**ZELDOVICH**, Yakov Borisovich (1914-1987)



# Great Precursors, Creators & Propagators

## OF RELATIVITY

Portraits by Margaret Osiak



- Nicolaus Copernicus (1473-1543)
- Giovanni Bruno (1584-1600)
- Galileo Galilei (1564-1642)
- Johannes Kepler (1571-1630)
- René de Pierre Descartes (1596-1650)
- Isaac Newton (1642-1727)
- Olo (Olavo) C. Römer (1644-1710)
- James Bradley (1683-1728)
- Leonhard Euler (1707-1783)
- Joseph L. de Lagrange (1736-1813)
- Heinrich W. M. Olbers (1758-1840)
- Thomas Young (1773-1829)
- Carl F. Gauss (1777-1855)
- Simon D. Poisson (1781-1842)
- Dominique F. J. Arago (1786-1853)
- Augustin J. Fresnel (1788-1827)
- Augustin L. Cauchy (1789-1857)
- Michael Faraday (1791-1867)
- Giuseppe G. de Celesia (1792-1843)
- Nikolai I. Lobachevsky (1793-1856)
- Christian J. Doppler (1803-1853)
- William R. Hamilton (1805-1865)
- Hippolyte L. Fizeau (1808-1894)
- Jean B. L. Foucault (1819-1888)
- Georg F. B. Riemann (1826-1866)
- Oliver B. Christoffel (1829-1900)
- James C. Maxwell (1831-1879)
- Ernst Mach (1838-1916)
- Edward W. Morley (1838-1923)
- Martin S. Liep (1842-1899)
- John W. S. Rayleigh (1842-1919)
- Roland von Eötvös (1848-1919)
- Felix C. Klein (1849-1925)
- Wilhelm Voigt (1850-1919)
- George F. FitzGerald (1861-1901)
- Albert A. Michelson (1852-1931)
- Hendrik A. Lorentz (1853-1928)
- Gregorio Ricci-Curbastro (1853-1925)
- Henri Poincaré (1854-1912)
- Luigi Bianchi (1856-1928)
- Joseph Larmor (1857-1942)
- Heinrich R. Hertz (1857-1894)
- Max K. E. L. Planck (1858-1947)
- David Hilbert (1862-1943)
- Hermann Minkowski (1864-1919)
- Pieter Zeeman (1865-1943)
- Élie J. Cartan (1869-1951)
- Paul Langevin (1872-1946)
- Willem de Sitter (1872-1934)
- Tullio Levi-Civita (1873-1941)
- Carl Schwarzschild (1873-1916)
- Czesław Białobrzewski (1878-1953)
- Marcell Grossmann (1878-1936)
- Albert Einstein (1879-1955)
- Max von Laue (1879-1960)
- Leonid I. Mandelstam (1879-1944)
- Paul Ehrenfest (1880-1933)
- Arthur S. Eddington (1882-1944)
- Amalie F. Nother (1882-1935)
- Stanislaw Loria (1883-1958)
- Erwin Schrödinger (1887-1961)
- Aleksander A. Friedman (1888-1925)
- Léon Brillouin (1889-1969)
- Gunnar Nordström (1881-1923)
- Richard C. Tolman (1881-1948)
- Max Born (1882-1970)
- Theodor F. E. Kaluza (1885-1954)
- Hermann C. H. Weyl (1885-1955)
- Adriaan D. Fokker (1887-1961)
- Edwin P. Hubble (1889-1933)
- Oscar B. Klein (1894-1977)
- Georges H. J. E. Lemaitre (1894-1966)
- John L. Synge (1897-1995)
- Vladimir A. Fock (1898-1974)
- Leopold Infeld (1898-1968)
- Wolfgang Pauli (1900-1958)
- Paul A. M. Dirac (1902-1984)
- Eugene P. Wigner (1902-1995)
- Howard P. Robertson (1903-1961)
- William M. McCrea (1904-1999)
- Christian Müller (1904-1980)
- J. Robert Oppenheimer (1904-1967)
- Hans A. Bethe (1906-2005)
- Kurt Gödel (1906-1978)
- Lev D. Landau (1908-1968)
- Victor F. Weisskopf (1908-2002)
- Arthur G. Walker (1909-2001)
- Subramanyam Chandrasekhar (1910-1995)
- Aleksandr Z. Petrov (1910-1972)
- William A. Fowler (1911-1995)
- George Segre (1912-2005)
- John A. Wheeler (1912-2008)
- Hartland S. Snyder (1913-1962)
- Yakov B. Zel'dovich (1914-1987)
- Peter G. Bergmann (1915-2002)
- Fred Hoyle (1915-2001)
- Andrzej Lichnerowicz (1915-1998)
- Evgenij M. Lifshitz (1915-1985)
- Robert H. Dicke (1916-1997)
- Vitaly L. Ginzburg (1916-2009)
- Martin Ryle (1918-1984)
- Hermann Bondi (1919-2005)
- Isak M. Khalatnikov (1919-2021)
- Robert V. Pound (1919-2010)
- Joseph Weber (1919-2000)
- Andrei D. Sakharov (1921-1989)
- Antony Hewish (1924-2021)
- Marin D. Kostak (1925-2006)
- Abdus Salam (1926-1996)
- Dennis W. Sciama (1926-1999)
- Roger Penrose (1919- )
- Sheldon L. Glashow (1925- )
- Charles W. Misner (1925-2023)
- Arno A. Penzias (1923-2024)
- Andrzej Trautman (1932- )
- Steven Weinberg (1932-2021)
- Roy P. Kerr (1934- )
- Igor D. Novikov (1935- )
- Robert W. Wilson (1936- )
- Kip S. Thorne (1940- )
- Joseph W. Taylor (1941- )
- Stephen W. Hawking (1942-2018)
- Alan H. Guth (1947- )
- Russell A. Hulse (1950- )
- Edward Witten (1951- )
- Pavel D. Murat (1954- )