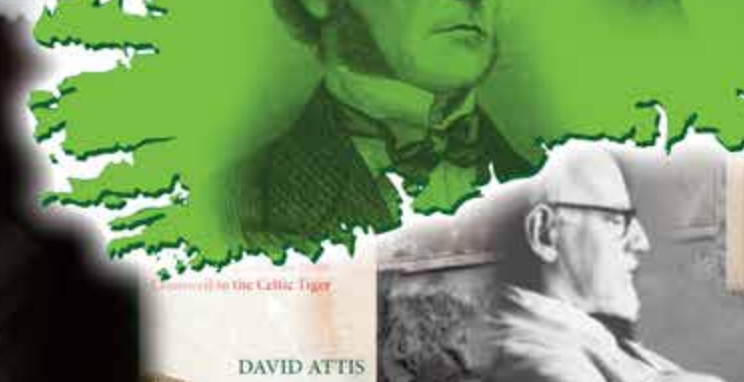
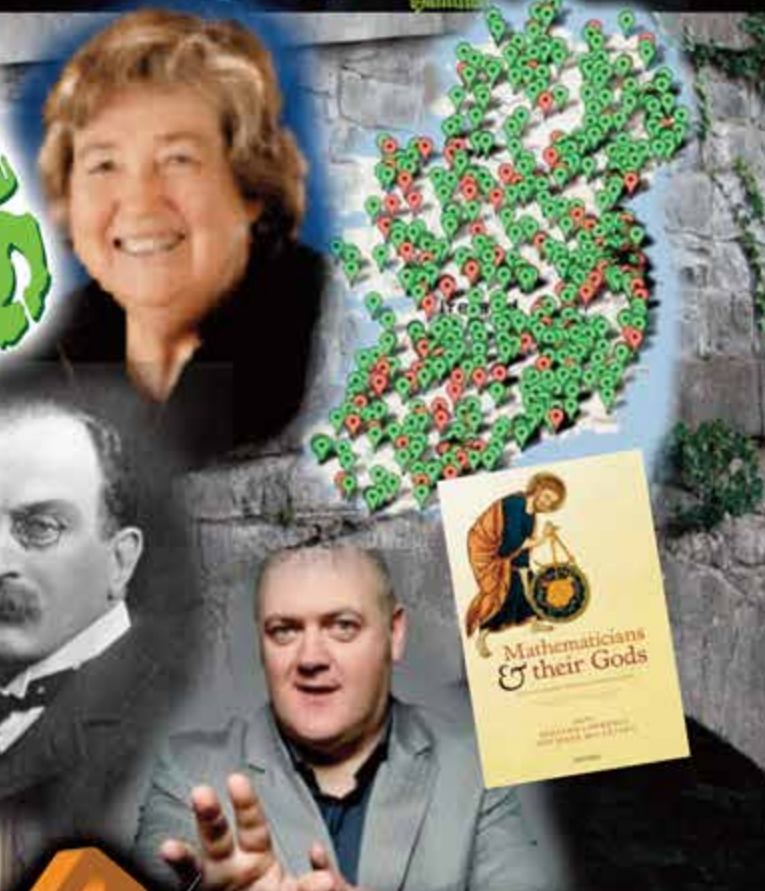


maths Boole Mathematical got PhD applied Belfast wrote @georgeboole200 book
 University of Dublin @georgeboole200 book work
 Irish first mathematician George Ireland
 born Dublin published Mathematics
 John Cork Dublin Galway taught



Irish Mathematics Calendar 2016



Des MacHale

was born 28 January in Castlebar, Mayo, and was educated at UCC and the University of Keele. He has spent his entire career at UCC, working in group and ring theory. He wrote the definitive biography of George Boole, the first Prof of Maths at what was then Queen's College Cork. He has also authored a large number of books on puzzles and humour.



Annette Pilkington

was born 16 January in Daingean, Offaly. She was educated at UCD and at the University of Notre Dame, where she now teaches. She is an algebraist whose research interests are in classical groups, K-theory, and representation theory.



Mathematical physicist **Sheila Tinney** (née Power, 1918-2010) was born 15 January in Galway, where her father was professor of maths. She was educated at UCD and the University of Edinburgh, becoming the first Irish woman to get a doctorate in mathematical science. She worked at UCD, introducing generations of students to quantum physics.



Ken Houston

was born 13 January in Belfast, and was educated at QUB. He taught at UU Jordanstown for over 3 decades, where he aimed to encourage in mathematics undergrads the art of mathematical modelling and to adopt this as their professional "Way of Life," and he published a lot in this area. His book *Creators of Mathematics: The Irish Connection* is essential reading.



Robert Boyle (1627-1691)

was born 25 January in Lismore, Waterford, and as a child was educated privately and at Eton, as well as in Italy. He was one of the most important figures of the period known as the Scientific Revolution, and is best known for Boyle's law which describes the inversely proportional relationship between the pressure and volume of a gas.



Brendan Goldsmith was born 22 January in Belfast, and was educated at QUB and Oxford. He started his career at Kevin Street, and in time became the first president of the new Dublin Institute of Technology. He is an algebraist by training, and has supervised several doctoral theses.

1. The Irish Mathematics Teachers' Association was founded 2 Jan 1964. The IMTA aims to further the study and teaching of mathematics and to foster co-operation between teachers of mathematics at all levels. All those interested in mathematics and mathematics education may apply for membership, but it mainly comprises teachers of mathematics at post-primary level.
2. BT Young Scientist takes place each year in the RDS, Dublin in early January. Schools from all over Ireland compete in many diverse areas of science and mathematics. In January 2014, Paul Clarke achieved great success in the competition with his project "Contributions to cyclic graph theory." He is now pursuing mathematical studies at Cambridge.

JANUARY

2016

| Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday |
|---|---------------------------------|------------------------------|------------------------------|--|--|-----------|
| | | | | 1 New Year's Day | 2 Walter Heitler (1904-1981) Irish Mathematics Teachers' Association founded, 1964 | 3 |
| 4 | 5 John Cosgrave | 6 | 7 | 8 | 9 | 10 |
| | | | BTYSTE | BTYSTE | BTYSTE | |
| 11 | 12 Brian McMaster | 13 Ken Houston | 14 | 15 Sheila Power (1918-2010) | 16 Sean Tobin Colm Ó Muircheartaigh Annette Pilkington | 17 |
| 18 | 19 | 20 | 21 | 22 Brendan Goldsmith | 23 | 24 |
| 25 Robert Boyle (1627-1691) | 26 | 27 | 28 Des MacHale | 29 Deadline for registration for John Hooper Medal for Statistics 2016 | 30 | 31 |
| | | | | | | |

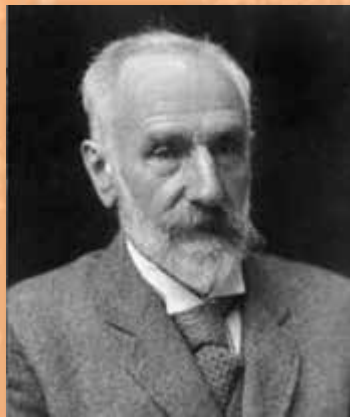


John Ryan

was born 27 February in Holycross, Tipperary. His mathematics education was all completed at UCC. For over thirty years he's been a missionary priest working in Malawi. He's currently also teaching at Mzuzu University, specialising in coding theory.



Sophie Bryant (nee Willock, 1850-1922), was born 15 February in Dublin. She earned degrees from the Univ of London in both mental and moral philosophy and maths. She taught at several schools and wrote many books on diverse topics. She was the first woman to have a paper published in the *Proceedings of the London Mathematical Society*.



Political economist and statistician **Francis Ysidro Edgeworth** (1845-1926) was born 8 February in Edgeworthstown, Longford. He didn't study maths and economics until after he'd earned degrees in languages and law from TCD and Oxford, but later published a lot in mathematical economics.



Siobhan Vernon (nee O'Shea, 1932-2002) was born 24 February in Macroom, Cork. After completing her BSc and MSc at UCC, she taught there for over 30 years. Her 1964 PhD in mathematical analysis, also from UCC, is believed to be the first doctorate in pure mathematics earned by an Irish woman.



Informatics and computing pioneer **Gordon Foster** (1921-2010) was born 24 February in Belfast, and was educated at QUB and at Oxford. His career included stints at Bletchley Park, the University of Manchester (alongside Alan Turing), the London School of Economics and many years at TCD. He devised a 9-digit code upon which the International Standard Book Number (ISBN) is based, and later worked to connect remote areas of the world to the internet.



Mathematics education expert **Elizabeth Oldham** was born 11 February in Sheffield, of Irish parents. She was educated at TCD, where she has spent most of her career in the School of Education. She has been involved in several studies by the Educational Research Centre. Her work relates to mathematics curriculum and to teaching and learning mathematics.



Dara Ó Briain was born on the 4th February 1972. This Irish-born presenter and comedian is well known for his efforts to popularise maths and science with shows such as "School of Hard Sums," and "Dara Ó Briain's Science Club".

FEBRUARY

2016

| Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday |
|---|------------------------------------|--|-------------------------------------|------------------------------------|----------------------|----------------------|
| 1 | 2 Cornelius Lanczos (1893-1974) | 3 | 4 Terry Maguire Dara Ó Briain | 5 Bartholomew Lloyd (1772-1837) | 6 | 7 |
| 8 Francis Edgeworth (1845-1926) | 9 | 10 Agnes Mary Clerke (1842-1907) | 11 Elizabeth Oldham | 12 Sean Dineen | 13 | 14 |
| 15 Sophie Willock (1850-1922) George Stoney (1826-1911) | 16 Petros Florides | 17 | 18 | 19 Therese Dooley | 20 Joseph Varilly | 21 David Lewis |
| 22 | 23 | 24 Gordon Foster (1921-2010) Siobhan O'Shea (1932-2002) John O'Donoghue | 25 James McConnell (1915-1999) | 26 | 27 John Ryan | 28 Engineers Week |
| 29 Engineers Week | | | | | | |
| | | | | | | |



Mathematical physicist **Lochlainn O'Raifeartaigh** (1933-2000) was born 11 March in Dublin. Educated at UCD and the University of Zürich, he worked for over 30 years at the Dublin Institute for Advanced Studies. He was particularly interested in the application of symmetries in particle physics, and he wrote five books.



Mathematical physicist **John Lighton Synge** (1897-1995) was born 23 March in Dublin. Educated at TCD, he taught there and at the University of Toronto, as well as in the USA, finishing his career at the Dublin Institute for Advanced Studies. He wrote 11 books. His daughter Cathleen Morawetz was educated in Canada and had a long and successful mathematical career at the Courant Institute.



Mathematician, geophysicist and social activist **Gerry Gardner** (1926-2009) was born 2 March in Tullamore, Offaly. Educated at TCD and Princeton, he worked in the USA in the oil and natural gas industries. A statistical analysis of his was used in a US Supreme Court decision.



Aisling McCluskey was born in Belfast on the Ides of March, and was educated at QUB. She is a topologist and teaches at NUI Galway. She recently co-authored a book on undergraduate topology with Brian McMaster from QUB.



Philosopher **George Berkeley** was born 12 March 1685 in Thomastown, Kilkenny. A Church of Ireland bishop, he was educated at TCD and wrote a critique of the foundations of calculus. The University of California at Berkeley is named after him (though pronounced differently).



Aoibhinn Ní Shúilleabháin was born 16 March and is from Carnacon, Mayo. She studied theoretical physics at UCD, and recently completed a doctorate in mathematics education in TCD. She has taught mathematics and physics at secondary level, and now lectures in mathematics pedagogy at UCD. She is also an experienced radio and TV broadcaster.

Computus: Easter falls on 27 March this year. It was 5 April last year. Why does it vary from year to year? It is determined by astronomical considerations, and the monasteries in early medieval Ireland (circa 600-850) were renowned throughout Europe for this study of calendar, known as the computus. For more information, see the work of Prof. Dáibhí Ó Cróinín & Dr Daniel McCarthy.

MARCH

2016

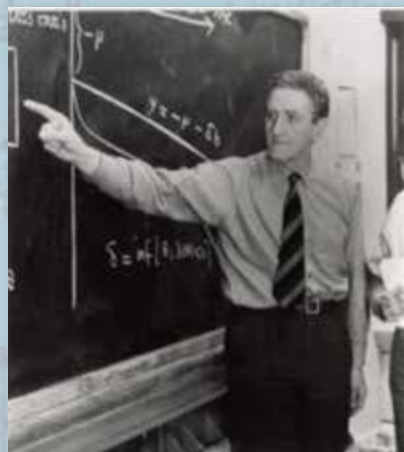
| Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday |
|----------------------------|--------------------------------|--|---|--|--|--|
| | 1 | 2 Gerry Gardner (1926-2009) Nora Ni Chuiv | 3 | 4 | 5 Iggy Ó Muircheartaigh | 6 |
| | Engineers Week | Engineers Week | Engineers Week | Engineers Week | Engineers Week | |
| 7 | 8 | 9 | 10 Eugene Gath | 11 Lochlainn O'Raifeartaigh (1933-2000) | 12 George Berkeley (1685-1753) | 13 |
| 14 | 15 Aisling McCluskey | 16 Aoibhinn Ní Shúilleabháin | 17 St. Patrick's Day Michael P. Tuite | 18 Noon deadline for receiving posters for John Hooper Medal for Statistics 2016 | 19 | 20 |
| 21 Neil Hallinan | 22 | 23 John L. Synge (1897-1995) | 24 | 25 Good Friday | 26 | 27 Easter Sunday Summertime Begins |
| 28 Easter Monday | 29 | 30 | 31 | | | |
| | | | | | | |



Statistician **Roy Geary** (1896-1983) was born 11 April in Dublin. After studying at UCD and the Sorbonne, he had a long career in the Department of Industry and Commerce, before leading both the Central Statistics Office and the Economic and Social Research Institute. His name lives on in the Stone-Geary utility function, the Geary-Khamis dollar, and elsewhere.



Statistician **Sally McClean** was born 30 Apr in Belfast, was born 30 April in Belfast and was educated at QUB and Cardiff. After getting her PhD at UU Coleraine, she joined the staff and has supervised about 40 PhDs there and at UU Jordanstown. She has co-authored an influential text on statistical techniques for manpower planning.



Mathematical physicist **John T. Lewis** (1932-2004) was born 15 April in Swansea. He was educated at QUB, taught at Oxford, and for 25 years he was director of the Dublin Institute of Advanced Studies. His areas of interest included quantum measurement, Bose-Einstein condensation and large deviations theory, and he supervised about 30 doctoral theses.



Astronomer **Annie Maunder** (née Russell, 1868-1947) was born 14 April in Strabane, Tyrone. In 1889 she was the highest ranked mathematics student at the BA examinations at Girton College, Cambridge, but as a woman was denied a degree. For decades she pursued solar research at Greenwich Royal Observatory, often publishing her findings under her husband's name.



Applied mathematician **Mark McCartney** born 17 April in Belfast, and was educated at QUB. He teaches at the University of Ulster at Jordanstown, and his expertise includes vehicle dynamics and physics. He has co-authored several biographical books on physicists and mathematicians.



John Toland was born 28 April in Derry, and was educated at QUB and the University of Sussex. He has spent his career at University College London and at Bath, and recently became director of the Isaac Newton Institute at Cambridge. In 1978, he proved Stokes' conjecture on the existence of gravity waves of maximum height on deep water.

The Irish Mathematical Society was founded 14 Apr 1976. The IMS aims to further mathematics and mathematical research on the island. Its membership is international, but it mainly represents mathematicians in Irish universities and other third level institutes. April 2016 marks its 40th anniversary, and a special meeting will be held to make that occasion.

APRIL

2016

| Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday |
|--|---|------------------------------------|--|--|--|--|
| | | | | 1 | 2 | 3 |
| 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 11 <small>R. C. Geary (1896-1983)</small> | 12 | 13 | 14 <small>Annie Russell (1868-1947) The Irish Mathematical Society founded 1976</small> | 15 <small>John T. Lewis (1932-2004) IMS meeting</small> | 16 <small>IMS meeting</small> | 17 <small>William Molyneux (1656-1698) Mark McCartney</small> |
| 18 | 19 <small>James Cullen (1867-1933) James Gleeson</small> | 20 <small>Philip Boland</small> | 21 | 22 | 23 | 24 <small>Tech week</small> |
| 25 <small>Tech week</small> | 26 <small>Tech week</small> | 27 <small>Tech week</small> | 28 <small>John Toland Tech week</small> | 29 <small>Tech week</small> | 30 <small>Sally McClean Tech week</small> | |
| | | | | | | |



John Casey (1820-1891)

was born 12 May in Coolattin, Limerick. He was self-educated until he graduated from TCD in middle age. He later opted to teach at the Catholic University of Ireland, rather than at TCD where he was offered a position, and wrote 7 books on geometry.



John Campbell (1862-1924)

was born 27 May in Lisburn, Antrim, and was educated at Queens, Belfast, and at Oxford. His career was entirely at Oxford, where he was an early supporter of women's education. He worked in Lie algebras and differential geometry, and wrote two influential books.



John (Jack) Todd (1911-2007)

was born 16 May in Carnacally, Down, and studied at QUB and Cambridge. He worked at QUB and King's College, London, and later at the National Bureau of Standards and Caltech in the USA. He was an early proponent of using computers to do numerical mathematics. His efforts in the late 1940s helped to ensure the preservation of the Oberwolfach Mathematical Research Institute in Germany.



Astronomer **Alice Everett (1865-1949)**

was born 15 May in Glasgow, and brought up in Belfast, where her father was professor of natural philosophy at Queen's College, she studied maths there, and at Girton College, Cambridge, but her BA and MA degrees were awarded by the Royal University of Ireland. She worked at the Royal Observatory in Greenwich, and later did research in optics and the engineering of early television.



Tony O'Farrell

was born 28 May in Dublin, and was educated at UCD and Brown. He spent over 35 years teaching at Maynooth, where he also helped to set up the department of computer science. His books (and publishing house, Logic Press) reflect his diverse mathematical interests. On 16 Oct 1990, he organised the first Hamilton Walk to Broom Bridge, in Dublin.



Martin Mathieu

was born 11 May in Heidelberg, grew up in Bavaria, and was educated at Tübingen. He worked there and in Saarbrücken and Maynooth before settling at QUB. His research area is operator theory and operator algebras, and he has published 6 books.

1. The Society of Actuaries in Ireland is the professional body of Irish actuaries. It was founded on 3 May 1972 with 17 members. Since then, the membership has grown to more than 1 000.
2. In May 2012 it was announced by Eugene Benilov, Cathal Cummins and William Lee at the University of Limerick that an old stout bubbles mystery had been solved: it was the shape of the standard pint glass which allowed bubbles to sink along the edges during pouring, while invisibly rising in the middle to complete the circulation.

MAY

2016

| Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday |
|--|--|-------------------------------------|---|--|---|--|
| | | | | | | 1 |
| 2 May Day | 3 <small>The Society of Actuaries in Ireland founded 1972</small> | 4 | 5 <small>Robin Harte</small> | 6 | 7 | 8 <small>Trevor West (1938-2012)</small> |
| 9 | 10 | 11 <small>Martin Mathieu</small> | 12 <small>John Casey (1820-1891)</small> | 13 | 14 | 15 <small>Alice Everett (1865-1949)</small> |
| 16 <small>John Todd (1911-2007)</small> | 17 <small>James R. Timoney (1909-1985)</small> | 18 | 19 <small>Brendan Scaife</small> | 20 <small>GiG (Groups in Galway)</small> | 21 <small>GiG (Groups in Galway)</small> | 22 <small>A.C. Dixon (1865-1936)</small> |
| 23 | 24 | 25 | 26 | 27 <small>John Campbell (1862-1924)</small> | 28 <small>Tony O'Farrell</small> | 29 |
| 30 Bank Holiday (NI) | 31 | | | | | |



Alicia Stott (nee Boole, 1860-1940) was born 8 June in Cork, a daughter of George & Mary Boole, and was educated in London. Though she never attended university, she was a pioneer in the visualisation of 4-dimensional shapes. She published several papers, and coined the term polytope for higher dimensional analogues of polyhedra.



Statistician **Donal McCarthy** (1908-1980) was born 4 June in Midleton, Cork. He was educated to PhD level at UCC, and served on the staff there, later becoming president of the college. He also did a term as director of the Central Statistics Office.



Meteorologist **Peter Lynch** was born 19 June in Dublin, and was educated at UCD. After a career with the Irish Met Service, he returned to UCD to teach and supervise research on numerical weather prediction. In the Irish Times, he writes about mathematics for the general public.



John (Jack) Semple (1904-1985) was born 10 June in Belfast, and was educated at QUB and at Cambridge. He lectured at QUB and at King's College, London. He co-authored 3 books on algebraic geometry.



Statistician **William Gosset** (1876-1937) was born 13 June in Canterbury, and educated at Oxford. For 35 years he worked at the Guinness brewery in Dublin. He is best remembered for the so-called Student's t-distribution.



Fiacre O Cairbre was born 21 June in Drogheda, Louth, and was educated at Maynooth and Berkeley. He teaches at Maynooth and for many years has led the Hamilton Walk in Dublin, each 16 Oct, from Dunsink Observatory to Broom Bridge.

1. The Central Statistics Office was established as a statutory body in 1993, but had existed, as an independent office, within the Department of the Taoiseach since June 1949
2. Mathematician and mathematical biographer Edmund Robertson was born 1 June in St. Andrews, Scotland. Over the past two decades, he's written 2800 biographies of mathematicians for the MacTutor History of Mathematics website hosted by St. Andrews University. MacTutor is a great source of detailed information on Irish mathematicians.
3. The annual Robert Boyle Summer School celebrating the life and legacy of Ireland's most famous Scientist Robert Boyle takes place from 23 - 26th June at his birthplace Lismore Waterford. Boyle showed that the pressure exerted on a gas was inversely proportional to the volume it occupied: $P \propto 1/V$.

JUNE

2016

| Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday |
|--|-------------------------------|---------------------------------------|---|---|---|--|
| | | 1 Edmund Robertson | 2 Ralph Henstock (1923-2007) Alexei Pokrovskii (1948-2010) | 3 | 4 Donal McCarthy (1908-1980) | 5 |
| 6 Bank Holiday (RoI) | 7 Maeve Maguire | 8 Alicia Boole (1860 -1940) | 9 | 10 John Semple (1904-1985) | 11 | 12 |
| 13 William Gossett (1876-1937) | 14 | 15 | 16 | 17 | 18 | 19 Peter Lynch |
| 20 | 21 Fiacre O Cairbre | 22 Luke Drury | 23 Robert Boyle Summer School | 24 Derrick Crothers Robert Boyle Summer School | 25 Samuel Verblunsky (1906-1996) Susan Lazarus Robert Boyle Summer School | 26 William Thomson (1824-1907) Victor Meally (1911-1986) Robert Boyle Summer School |
| 27 | 28 | 29 | 30 | | | |
| | | | | | | |



Mathematical physicist **John Stewart Bell** (1928-1990) was born 28 July in Belfast. He was educated at QUB and the University of Birmingham, and spent much of his career at CERN. He is known for a 'no-go theorem' named after him.



Theoretical physicist **Joseph Larmor** (1857-1942) was born 11 July in Magheragall, Antrim. Graduating from Queen's College, Belfast, he did his PhD at Cambridge, where he spent most of his career. He studied electricity, dynamics, and thermodynamics. His 1900 book *Aether and Matter* was influential at the time.



Oliver Byrne (1810-1890) was born 31 July in Avoca, Wicklow. He started publishing in Dublin at age 20, but spent most of the rest of his life in England and the USA. He is remembered for a book giving an innovative coloured treatment of Euclid.



Statistician **Adrian Raftery** was born 22 July in Dublin, and was educated at TCD and the Université Pierre et Marie Curie in Paris. Most of his career has been spent at the University of Washington in Seattle. He has supervised over 25 PhDs, and was identified as the world's most cited researcher in mathematics for the period 1995-2005.



Astronomer and mathematical physicist **Robert Stawell Ball** (1840-1913) was born 1 July in Dublin, and was educated at TCD. Ball worked at Birr, TCD and Dunsink and as was Royal Astronomer. In mechanics, he invented the screw theory, and he authored many books.

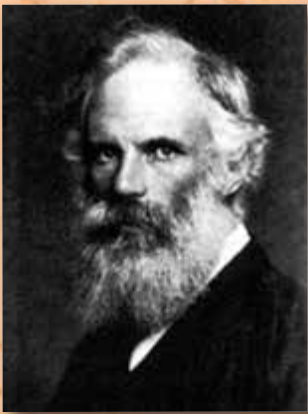


Edgar Harper (1880-1916) was born 4 July in Dungannon, Tyrone. He earned a BA and MA from the Royal University of Ireland, and taught at the University of North Wales in Bangor, where he co-authored a book on the mathematics of flying. He became Prof of Mathematics at UCC in 1913, but in 1915 obtained an army commission and left. In July 1916, he died during the Battle of Albert at the Somme.

JULY

2016

| Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday |
|---|------------------------------------|---|--|--|---|---|
| | | | | 1 Robert Ball (1840-1913) | 2 Ross Geoghegan | 3 |
| 4 Edgar Harper (1880-1916) | 5 | 6 | 7 | 8 | 9 | 10 |
| 11 Joseph Larmor (1857-1942) | 12 Battle of the Boyne (NI) | 13 | 14 | 15 | 16 | 17 Richard M. Timoney |
| 18 7ECM Berlin | 19 7ECM Berlin | 20 Paddy Kennedy (1929-1966) Brendan O'Sullivan 7ECM Berlin | 21 7ECM Berlin | 22 Adrian Raftery Eugene Benilov 7ECM Berlin | 23 | 24 ICME13 Hamburg |
| 25 Rachel Quinlan ICME13 Hamburg | 26 ICME13 Hamburg | 27 ICME13 Hamburg | 28 John Bell (1928-1990) ICME13 Hamburg | 29 Sean Close Sinead Breen ICME13 Hamburg | 30 Irish presentation at ICME13, Hamburg | 31 Oliver Byrne (1810-1880) ICME13 Hamburg |
| | | | | | | |



Mathematical physicist **George FitzGerald** (1851-1901) was born 3 August 1851 in Dublin, and his education and career were both at TCD. He was a pioneer in electromagnetic theory, and his name lives on today in the Lorentz-FitzGerald contraction.



Francis Murnaghan (1893-1976) was born 4 August in Omagh, Tyrone. He was educated at UCD and then at Johns Hopkins. He later spent 30 years on the staff at Johns Hopkins and wrote 16 books on various topics in mathematics and mathematical physics.



John Herivel (1918-2011) was born 29 August in Belfast. Upon graduation from Cambridge he was drafted to work at Bletchley Park. Following the war, he taught at QUB for thirty years, and later at Oxford, writing several biographical books along the way.



Mathematical physicist **George Stokes** (1819-1903) was born 13 August in Skreen, Sligo. His education and entire professional life was at Cambridge. His legacy includes Stokes' theorem in multivariable calculus and the Navier-Stokes equations in fluid dynamics.



William Rowan Hamilton (1805-1865) was born 4 August in Dublin, and is Ireland's most renowned mathematician and mathematical physicist. He was educated and spent most of his career at TCD. His extensive legacy includes innovations in algebra, mechanics and optics. He is best known for quaternions, a non-commutative algebraic system.



John Miller was born 11 August in Dublin. At TCD, he studied modern languages before switching to maths. Following postgraduate work at MIT, he spent his most of his career at TCD, working on the numerical analysis of singularly perturbed differential equations. His current interests include the application of maths to renewable energy. He has supervised 16 doctorates, and has 14 books to his name.

The Weaire-Phelan structure, a complex 3-dimensional structure representing an idealised foam of equal sized bubbles was discovered in 1993. For the 2008 Olympics, this structure was the inspiration for the National Aquatics Centre in Beijing, China.

AUGUST

2016

| Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday |
|---|-----------|--|---|--|---|-----------|
| 1 Bank Holiday (RoI) | 2 | 3 <small>George FitzGerald (1851-1901)</small> | 4 <small>William Rowan Hamilton (1805-1865) Francis Murnaghan (1893-1976)</small> | 5 | 6 | 7 |
| 8 <small>Annraoi de Paor</small> | 9 | 10 | 11 <small>John Miller</small> | 12 <small>Erwin Schrödinger (1887-1961) Michael Mackey</small> | 13 <small>George Stokes (1819-1903)</small> | 14 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 <small>Philip Gormley (1910-1973) Natalia Kopteva</small> | 23 | 24 | 25 | 26 <small>James Booth (1860-1878)</small> | 27 | 28 |
| 29 Bank Holiday (NI) <small>John Herivel (1918-2011) Dáibhí Ó Cróinín</small> | 30 | 31 | | | | |
| | | | | | | |



George Salmon (1819-1904)

was born 25 September in Dublin, and grew up in Cork. A Church of Ireland clergy man, he studied at TCD where he also spent his career, writing numerous popular and influential books on higher level algebra and geometry, some of which appeared in French, German and Italian translation.



Journalist **Mary Mulvihill (1959-2015)**

was born 1 September in Dublin. She studied genetics and statistics at TCD. Her articles, broadcasts, and books championed forgotten Irish STEM pioneers, including many women. Her work reached thousands and she left a legacy of written and aural material through her "Ingenious Ireland" project.



Patrick d'Arcy (1725-1779)

was born 27 September in Kiltulla Castle, Galway, and was educated privately in Paris, following which he had a successful career in the French army. He is remembered for his contributions to dynamics, especially angular momentum.



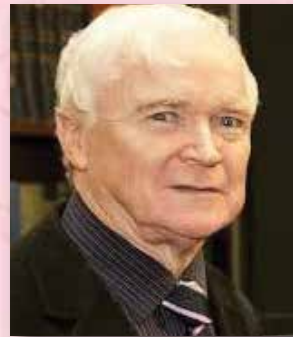
Robert Adrain (1775-1843)

was born 30 Sep in Carrickfergus, Antrim, and is believed to have been self-taught. Following the 1798 rebellion, he moved to the USA, where he was one of the leading lights of academic mathematics in the early 19th century, publishing the method of least squares before Gauss.



Annie Megaw (nee McElderry, 1874-1968)

was born 4 September in Ballymoney, Antrim. She earned her BA and MA in mathematics from Queen's College, Belfast, before the turn of the century, and then taught at Rutland School in Dublin, where she rose to the rank of principal. Her daughter Helen Magaw was a celebrated crystallographer.



Ted Hurley

was born 22 September in Tuam, Galway. He was educated at UCC and at Queen Mary College, London, and after stints in Sheffield and at UCD he taught for 30 years at UCC. His interests include group theory and coding and cryptography. He is passionate about mathematics education, and has written about it for the Irish Times. Four of his sons studied maths in university and went on to get PhDs.

SEPTEMBER

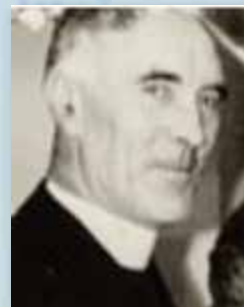
2016

| Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday |
|--------|---|--|---|--|----------|---|
| | | | 1 <small>Mary Mulvihill (1959-2015)</small> | 2 | 3 | 4 <small>Annie McElderry (1874-1968)</small> |
| 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| 12 | 13 <small>Patricia Eaton</small> | 14 | 15 <small>Deadline for submission of paper proposal for CERME 10, Dublin</small> | 16 <small>Martin L.Newell</small> | 17 | 18 |
| 19 | 20 | 21 | 22 <small>Ted Hurley</small> | 23 | 24 | 25 <small>George Salmon (1819-1904)</small> |
| 26 | 27 <small>Patrick d'Arcy (1725-1779)</small> | 28 <small>George Allman (1824-1904)</small> | 29 <small>Anca Mustata</small> | 30 <small>Robert Adrain (1775-1843)</small> | | |
| | | | | | | |



Physicist **Ernest Walton** (1903-1995)

was born 6 Oct in Dungarvan, Waterford, and his family moved around Ireland a great deal when he was young. He studied maths and physics at TCD and Cambridge, and his "splitting the atom" with John Cockroft in the early 1930s led to the two men later sharing a Nobel prize. He lectured at TCD for 4 decades.



Pádraig de Brún (1889-1960)

was born 13 October in Grangemoockler, Tipperary, and was educated at UCD and the Sorbonne. He spent three decades at St. Patrick's College, Maynooth, before becoming president of UCC. A priest and a classics and Irish scholar, as well as a mathematician, he wrote the famous poem "*Thánaig Long ó Valparaiso*".



Éamon de Valera (1882-1975)

was born 14 October in New York, and he grew up in Bruree, Limerick. He earned a maths degree in Dublin from the Royal University of Ireland, and then taught at various schools before turning to nationalist activities, and ultimately entering a long career in politics. In 1940, as Taoiseach, he initiated the foundation of the Dublin Institute for Advanced Studies.



Maurice O'Reilly was born 3 October in Dublin, raised in Wicklow, and educated at TCD. He has taught at Dundalk IT, in Dar es Salaam, and at St. Patrick's College, Drumcondra. Over the years his interests have turned from numerical analysis to mathematics education.



Mathematical physicist **Denis Weaire**

was born 17 October in Dalhousie, India, and brought up in Belfast. He was educated at Cambridge and spent his career at Yale, Heriot-Watt, UCD and TCD. In 1993, with Robert Phelan, he came up with a counter example to William Thompson's conjecture about the most economical way to partition space into cells of equal size with minimal surface area. The resulting structure was used in the design of the aquatic centre used in the 2008 Olympics in Beijing.



Eabhnat Ní Fhloinn

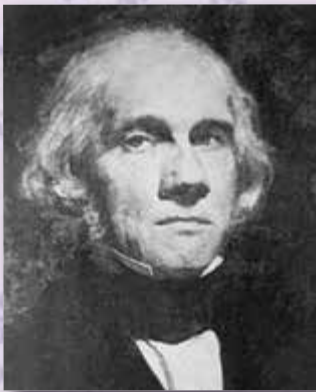
was born 14 October in Dublin, and was educated at TCD. Soon after completing her doctoral studies in cryptography, she joined staff at DCU, where she teaches maths and runs the innovative Maths Learning Centre.

- 1. Maths Week** Maths Week Maths Week Ireland is the world's biggest festival celebrating Maths and its applications and takes place each October all over the island. It is a community event with over 50 partner centres working together to promote maths. Events take place in schools, libraries, museums, in the media, with Maths in the City bringing maths out onto the streets in Dublin and Belfast.
- 2. Hamilton Walk** The Hamilton walk organised by Fiacre O Cairbre, Maynooth University commemorates the famous walk of Hamilton from Dunsink Observatory to Broombridge. It was here that Hamilton famously etched the equation of quaternions onto the bridge as he got a flash of inspiration that helped him resolve a problem he had been working on for several years.
- 3. Martin Gardner** "the best friend mathematics ever had" was an American popular maths and science writer. Many top Mathematicians credit Martin Gardner's "Mathematical Games" columns in Scientific American and his many puzzle books as reasons for them becoming interested in maths. Each year on and around 21 October, all around the world "Celebration of Mind" activities take place to honour his legacy.

OCTOBER

2016

| Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday |
|--|------------------|------------------|--|---|---|-----------------------------------|
| | | | | | 1 Alfred O'Rahilly (1884-1969) Stefan Hutzler | 2 Arthur Conway (1875-1950) |
| 3 Maurice O'Reilly | 4 | 5 | 6 Ernest Walton (1903-1995) Muiris O'Siurium Anna Hanna (1991-2002) | 7 | 8 | 9 |
| 10 | 11 | 12 | 13 Pádraig de Brún (1889-1960) | 14 Éamon de Valera (1882-1975) Eabhnat Ní Fhloinn | 15 Maths Week | 16 Hamilton walk Maths Week |
| 17 Denis Weaire RIA Hamilton Lecture Maths Week | 18 Maths Week | 19 Maths Week | 20 Maths Week | 21 Martin Gardner (1914-2010) Maths Week | 22 Maths Week | 23 Maths Week |
| 24 | 25 | 26 | 27 | 28 | 29 | 30 Summertime Ends |
| 31 Halloween Bank Holiday (RoI) | | | | | | |



Mathematician and thermodynamics pioneer

James Thomson (1786-1849)

was born 13 November in Ballynahinch, Down. He was educated at the University of Glasgow and was professor there following two decades at the Belfast Academical Institution. His son William (later Lord Kelvin) grew up in Glasgow and gained fame as a brilliant scientist, mathematician, and engineer.



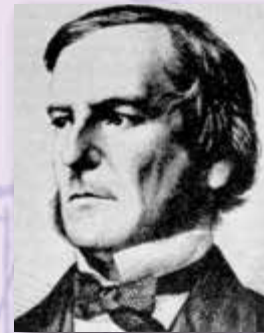
Gerry Murphy (1948-2006)

was born on 12 November in Dublin. Growing up in Drimnagh, he left school at 14, yet eventually earned degrees from TCD and Cambridge. He then taught at TCD, and later at UCC, where he was head of department. He authored two books on functional analysis.



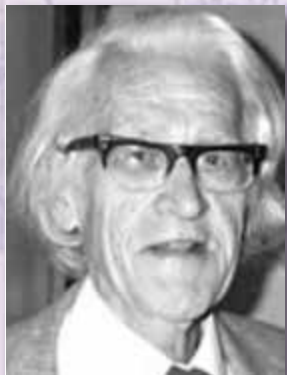
Brendan Steen (1921-2015)

was born 29 November in Ardee, Louth, and was educated at UCD. A Vincentian priest, he was considered to be one of the giants of maths education in Ireland. Over his long career, he taught at Castleknock College, St. Paul's College, Raheny, and St. Patrick's College, Drumcondra. He was Treasurer of the Dublin Branch of the IMTA for 50 years, retiring in 2014.



Mathematician and logician **George Boole** (1815-1864)

was born 2 November in Lincoln. Despite being largely self-taught, in 1849 he secured a job as Professor of mathematics at Queen's College, Cork. His legacy includes Boolean algebra, which laid the foundations of the information age. His daughter Alicia also made contributions to mathematics.



Mathematical Physicist **David Bates** (1916-1994)

was born 18 November in Omagh, Tyrone. He was educated at QUB and University College London, and later taught at both institutions. He worked in atmospheric and molecular physics, and was a founding member of the Alliance Party of Northern Ireland.



Statistician **Catherine Comiskey**

was born 16 November in Dublin, and grew up in New Ross, Wexford. She was educated at TCD and DCU. She taught at ITT Dublin and Maynooth, and now heads up TCD's School of Nursing & Midwifery. She has supervised numerous doctorates in biomathematics and statistical epidemiology.

The Irish Applied Mathematics Teachers Association formed 25 Nov 2006, and represents the views of Applied Maths teachers around the country. The IAMTA is a small vibrant community of like-minded teachers all of whom wish to enhance their own understanding of the subject as well as the learning experience of their pupils. It holds an annual meeting each November.

NOVEMBER

2016

| Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday |
|--------------------|--|--|--------------------|---|---|--|
| | 1 | 2 <small>George Boole (1815-1864) Henry Smith (1826-1883)</small> | 3 | 4 | 5 | 6 <small>Charles Graves (1812-1899)</small> |
| 7 | 8 <small>Bram Stoker (1847-1912)</small> | 9 | 10 | 11 | 12 <small>Gerard Murphy (1948-2006)</small> | 13 <small>James Thomson (1786-1849)</small> Science Week |
| 14 Science Week | 15 Science Week | 16 <small>Catherine Comiskey</small> Science Week | 17 Science Week | 18 <small>David Bates (1916-1994)</small> Science Week | 19 <small>Albert McConnell (1903-1993)</small> Science Week | 20 Science week |
| 21 | 22 | 23 | 24 | 25 <small>IAMTA (Irish Applied Mathematics Teachers Association) formed 2006</small> | 26 | 27 |
| 28 | 29 <small>Brendan Steen (1921-2015)</small> | 30 | | | | |
| | | | | | | |



Mathematician and astronomer **Bill McCrea** (1904-1999) was born 13 December in Dublin, and was educated at Cambridge. His career, which included a stint at QUB, was mostly spent at Royal Holloway College, London. He discovered that the sun is largely made of hydrogen and helium.



Samuel Haughton (1821-1897) was born 21 December in Carlow. He studied maths at TCD, where he later taught for over 35 years, for much of that as professor of geology. He was a Church of Ireland clergy man. His mathematical work was extensive, and he also qualified as a medical doctor. The 10 books he co-authored with TCD colleague Joseph Galbraith are credited with educating “a generation of Irishmen in technical issues that would make them skilled and employable.”



Brendan Guilfoyle

was born 7 December in Dublin. He was educated at TCD and at the University of Texas at Austin, and has long worked at IT Tralee. He helped to prove the Caratheodory Conjecture in classical surface theory, which had been unresolved for 80 years.



Patrick Dinneen (1860-1934), lexicographer and Catholic priest was born 25 December in Rathmore, Kerry. After earning a BA and MA in mathematics from the Catholic University of Ireland, he taught English, Irish, Classics and maths at many schools, before authoring the landmark Irish-English dictionary, *Foclóir Gaedhilge agus Béarla*.



Tom Laffey

was born 5 December in Cross, Mayo, and was educated at UCG and the University of Sussex. For over 40 years he lectured at UCD, pursuing research in group theory and linear algebra. He also played a major role in the successful establishment of the Irish Mathematical Olympiad.



Raymond Flood

was born 1 Dec in London and raised in Downpatrick, Down. He was educated at QUB, Oxford and UCD. He has taught at Kevin St., DCU, Oxford and Gresham College. Trained as a probabilist, he has great expertise in history and biography of mathematical science, and has authored or edited 9 books on those topics.

Newgrange is Ireland's most iconic megalithic tomb. The tomb was designed with a keen mathematical and engineering eye. On the Winter Solstice each year, a beam of light perfectly illuminates the inner tomb. In 2016, this will happen on December 21st at 10:44 UT

DECEMBER

2016

| Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday |
|--------------------------------------|--|--|------------------------|------------------------------------|---------------------------------------|---|
| | | | 1 Raymond Flood | 2 | 3 James Flavin (1936-2012) | 4 |
| 5 Tom Laffey | 6 | 7 Brendan Guilfoyle Peter McPolin | 8 | 9 | 10 | 11 |
| 12 | 13 Eoghan McKenna (1891-1967) William McCrea (1904-1999) Tony Wickstead | 14 | 15 | 16 Andrew Young (1919-1992) | 17 Maurice Kennedy (1924-1994) | 18 |
| 19 | 20 | 21 Winter solstice at Newgrange 10:44 UT. Samuel Haughton (1821-1897) | 22 | 23 | 24 | 25 Christmas Day Patrick Dinneen (1860-1934) Tom Sherry |
| 26 St. Stephen's Day / Boxing Day | 27 David Callan | 28 | 29 | 30 | 31 New Years Eve | |
| | | | | | | |

Did you know? (you would if you followed @IrishMathsFacts on Twitter!)

1. The Poisson distribution is seen in action when studying the number of yeast cells used when brewing Guinness, as shown by William Gosset (1876-1937).
2. Irish born and bred Sophie Bryant (1850-1922) was the first woman to have a paper published in the Proceedings of the London Mathematical Society.
3. The Edgeworth series in statistics is named after Longfordman Francis Ysidro Edgeworth (1845-1926).
4. The legacy of Dubliner William Rowan Hamilton (1805-1865) not only includes innovations in mechanics, optics, and algebra (e.g., quaternions), but also the icosian game.
5. The Geary-Khamis dollar, more commonly known as the international dollar, was proposed by Dublin statistician Roy Geary (1896-1983).
6. Tyrone's James MacCullagh (1809-1847) is credited with introducing what is now called the curl of a vector field.
7. Bram Stoker (1847-1912) from Dublin studied mathematics before pursuing a career in theatre management and later writing the Gothic horror novel Dracula.
8. Lorentz-FitzGerald contraction is named after Dublin mathematical physicist George FitzGerald (1851-1901).
9. Lisburn's John Edward Campbell (1862-1924) is remembered for his 1897 discovery of the Baker-Campbell-Hausdorff formula .
10. Annraoi de Paor from Waterford has published the book An Illustrated Collection of Limericks for Engineers and Physicists.
11. Statistician Adrian Raftery from Dublin has supervised over 25 PhDs and was identified as the world's most cited researcher in mathematics for the period 1995-2005.
12. A statistical analysis of mathematician, geophysicist and social activist Gerry Gardner (1926-2009) was used in a US Supreme Court decision.
13. Siobhan Vernon (1932-2002) from Cork is believed to be the first Irish woman to earn a doctorate in pure mathematics.
14. Matthew O'Brien (1814-1855) from Clare is credited with anticipating many results of classic vector analysis.
15. George Boole's daughter Alicia Stott (1860-1940) from Cork was a pioneer in the visualisation of 4-dimensional shapes, and she coined the term polytope.
16. Iggy McGovern from Belfast has published the book A Mystic Dream of 4, a sonnet sequence based on the life of William Rowan Hamilton.
17. Mathematical physicist Sheila Tinney (1918-2010) from Galway was the first Irish woman to get a doctorate in mathematical science.
18. In 1978, Derryman John Toland proved Stokes' conjecture on the existence of gravity waves of maximum height on deep water.
19. David Attis has published the book Mathematics and the Making of Modern Ireland: Trinity College Dublin from Cromwell to the Celtic Tiger.
20. Shortly before he died, William Rowan Hamilton (1805-1865) was elected the first foreign member of the National Academy of Sciences of the USA.

Did you know that Maths Week Ireland is the biggest maths festival in the world with over 270,000 engaged in maths activities in 2015?

JANUARY

2017

| Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday |
|-----------|-----------|-----------|-----------|-----------|-----------|-------------------------|
| | | | | | | 1 New Year's Day |
| 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| 23 | 24 | 25 | 26 | 27 | 28 | 29 |
| 30 | 31 | | | | | |



This calendar is a product of a wider project to celebrate Irish Mathematics and Mathematicians both historic and modern: illustrating the proud historical and strong contemporary contribution to the world of mathematics and consequently to the world at large. The project includes the Annals of Irish Mathematics, the Atlas of Irish Mathematics and documentation of Irish Mathematical Books.

The project can be found on www.mathsireland.ie
and followed on twitter @IrishMathsFacts

Maths Week Ireland was established in 2006 to promote mathematics and its applications across the island of Ireland. It is coordinated by Calmast at Waterford Institute of Technology. Taking place every October in the week including the 16th, Hamilton Day, it has grown to be the biggest festival of its kind in the world with over 270,000 participating in 2015. It is a partnership of universities, institutes of technology, teacher training colleges, professional bodies, visitor centres and other groups concerned with mathematics.

More information can be found at www.mathsweek.ie

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