

Biography

The man who introduced
the Maths Society

Matt Parker

*“If you're ever not sure if something is a number
or not, my test is to imagine asking someone for
half of it.”*

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maths to everyone

Introduction



MATT PARKER ADDRESSES OUR SOCIETY

Matt Parker, is an Australian-born author, comedian and mathematician, best known for talking about the funny side of numbers, most famously in his bestseller *Humble Pi*. He also produced a beautiful introductory video for the Maths Society, where he gave us an interesting conundrum to solve, which we will come back to later. He has done a great deal to popularise maths, as a former maths teacher, through YouTube videos, tours, and writing the first maths book to become a No. 1 Sunday Times bestseller. He now lives in the English town of Godalming in Surrey, working in the UK.

Early Life

Matthew Thomas Parker was born on 22 December 1980 in Perth, Australia's northern suburb Duncraig. When he was young, he started to show an interest in mathematics and science, and went to the University of Western Australia.

Studying mechanical engineering at first, he decided he did not want to be employed in the field, switching to physics and later maths. Parker enjoyed maths the most, and his love of it led to him seeking a job in the subject.

He also wrote comedy for the student magazine, *Pelican*, at university. Starting to produce comedy sketches, he enrolled on a stand-up course, having becoming interested comedy.

Career

Finishing college, Parker became a maths teacher in Australia. After a while, he then continued his profession in London.

He claims his goal has been to “to get more people excited about maths”, helping students to community maths to other people, writing books, working in media and speaking at schools. (Like the video he sent us)

In 2014, Parker set up Think Maths, a team of experienced mathematics speakers who visit schools to

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Career

run workshops and give talks for a wide range of ages and abilities, to show students the wider world of maths beyond school while giving them a chance to develop mathematical thinking skills.

YouTube videos

Appearing in numerous YouTube videos, Matt Parker has talked about many mathematical subjects. He often appears on popular channels such as James May's *Head Squeeze* (now known as *BritLab*), and most famously Brady Haran's *Numberphile*. Parker has his own YouTube channel, 'Stand-up Maths', referring to his comedy, which has over a million subscribers.

In a more peculiar twist, he has made numerous videos about unboxing calculators, presenting as part of a fictional 'Calculator Appreciation Society'.

Comedy tours

Matt Parker and fellow comedian Timandra Harkness co-wrote a comedy show named 'Your Days are Numbered: The Maths of Death' in 2012, performing it across Australia. It also featured at the Adelaide Fringe and Melbourne International Comedy Festival, on tour around Britain and at the Edinburgh Festival Fringe.

The comedian has toured the UK solo, as well as part of a comedy group along with Helen Arney and Steve Mould, Festival of the Spoken Nerd. His first solo tour, "Matt Parker: Number Ninja", finished in the July of 2013, while his second solo tour, "Matt Parker: Now in 4D", started in late 2014.

Books

The mathematician has written multiple books, his first called *Things to Make and Do in the Fourth Dimension*. His second book was *Humble Pi* was publishing in March 2019.

This was a collection of Matt's favourite mathematical mistakes, including bridges wobbling when they are not meant to and a poorly developed Pepsi advert. This was the first book about maths to be a Sunday Times no.1 bestseller in the United Kingdom.

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Career

Media contributions

BBC Radio 4's popular intellectual programme *Infinite Monkey Cage* with Robin Ince and Brian Cox has Matt Parker as a regular. On TV, Parker is also a regular commentator on *Outrageous Acts of Science*, a show on Discovery. He has also appeared on BBC Four's *Royal Institution Christmas Lectures*, assisting presenter Hannah Fry, in addition to talking about maths-related subjects on BBC News, Sky News, Channel 4 and CBBC. He also occasionally writes for *The Guardian*.

Podcasts

The influencer started an advice-based podcast called *A Problem Squared* which he co-hosts with author, comedian and presenter Bec Hill. During the episodes, both hosts presents a problem submitted by their listeners, which they attempt to solve exhaustively using their own research, occasionally along with special guests. New episodes aired monthly from November, 2019, to January, 2022, and then biweekly starting in March, 2022.

Following the COVID-19 pandemic, his comedy troupe Festival of the Spoken Nerd, also including Helen Arney and Steve Mould, could no longer perform their show *An Evening of Unnecessary Detail*. As a substitute, six episodes of *A Podcast of Unnecessary Detail* aired during September 2020. In the podcast, each of the hosts brings a usually maths or science related topic, which they explain to the audience. Twelve further episodes aired in 2022's second series.

Awards

Along with another YouTube mathematics influencer, Vi Hart, Parker won the 2018 Communications Award of the Joint Policy Board for Mathematics for “communicating the excitement of mathematics to a worldwide audience through YouTube videos, TV and radio appearances, book and newspaper writings, and stand-up comedy”.

Matt was also awarded the 2020 IMA-LMS Christopher Zeeman Medal in recognition of his “excellence in the communication of mathematics”. The award citation highlights work on YouTube, his books, Think Maths, Maths Inspiration, MathsJam, Maths Gear, and his work in broadcast media. The IMA being the Institute of Mathematics and its Applications, and the LMS being the London Mathematical Society.

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Personal Life

Married Life

Parker married Lucie Green in June 2014, an English solar physicist, and their wedding rings are made from meteoric iron. They live in Godalming, Surrey, England, with a labrador retriever named Skylab, who has her own YouTube channel.

Football road signs petition

In October 2017, Matt signed a petition to “Update the UK Traffic Signs Regulations to a geometrically correct football.” He explained how the current football sign was geometrically impossible in a YouTube video. Despite describing the current signs as a “national embarrassment”, and hoping the petition would “help raise public awareness and appreciation of geometry.”, the Department for Transport turned it down as he was a “comedian”, according to him.

By November the petition had 22,000 signatures, but the British government claimed the sign was well understood, and it would be costly to replace the signs. However, Parker only asked for a correct precedent for future.

Grafting Number

He introduced the recreational mathematics concept of a grafting number, an integer with the property that the square root of the integer, when expressed in base b , will contain the original integer itself before or directly after the decimal point.

Alphamagic squares

At the 2016 MathsJam Conference, Parker talked about what he called “letterwise magic squares”. He believed he was the first to find these squares, but he later posted a video to explain how the magic squares were more well known as alphamagic squares, on 5 May 2017.

Parker Square

Parker is the namesake of the Parker square, an internet meme consisting of a trivial semimagic square. Parker was attempting to create a magic square made up of all square numbers, however fell quite short of the goal. The semimagic

29^2	1^2	47^2
41^2	37^2	1^2
23^2	41^2	29^2

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The Matt Parker Conundrum

square Parker created uses some numbers more than once, and the diagonal $232 + 372 + 472$ sums to 4107, not 3051 as for all the other rows, columns, or diagonal. The Parker Square became a "mascot for people who give it a go, but ultimately fall short". It is also a metaphor for something that is almost right, but is a little off.

The Matt Parker Conundrum

At our first meeting, we were amazed when Australian author, comedian and mathematician Matt Parker sent us a wonderful introductory video, and also our oldest puzzle.

He is best known for writing about the funny side of numbers, particularly his most famous bestselling book, *Humble Pi*. He also occasionally hosts episodes of the maths-focused YouTube channel, Numberphile.

And what was that conundrum? We call it the Matt Parker Conundrum, but it doesn't really have a name.

Well, every prime number squared, except for 2 and 3 which are too low, is one more than a multiple of 24.

$$5^2 = 25 \quad 7^2 = 49 \quad 11^2 = 121$$

$$13^2 = 169 \quad 17^2 = 289 \quad 19^2 = 361$$

They are all one more than a multiple of 24



Why? Well, here is our rather complex proof...

Let n be not a multiple of three. Then $n=3m+1$ for some m

Let n also be odd. Then $3m$ is even and m is even. So $m=2k$ for some k

So $n=3 \cdot 2k \pm 1 = 6k \pm 1$.

And $n^2 = 36k^2 \pm 12k + 1$

And $36k^2 \pm 12k + 1 = 12(3k \pm 1)k + 1$.

If k is even, Then $12k$ is divisible by 24 and n^2 is one more than a multiple of 24.

If k is odd, then $3k^2 \pm 1$ is even. And then $12(3k^2 \pm 1)$ is divisible by 24 and n^2 is one more than a multiple of 24.

Yes. A bit difficult to see, but if you can do the working yourself, you'll soon understand the beauty of this.

Please do contact us if you can think of a cleaner solution!

Thanks Matt Parker.

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