on Earth as probe sends back ved safe' message from Jupiter

us hush as the numn computer screens oulsion Laboratory, pacecraft's progress ous with the solar planet.

gnal they had awaithey had worked for a simple radio nt 540 million miles f to say: "I'm here." Icome to Jupiter," a announced

ntrol room erupted plause, cheers and back-slapping. s to all of us," said

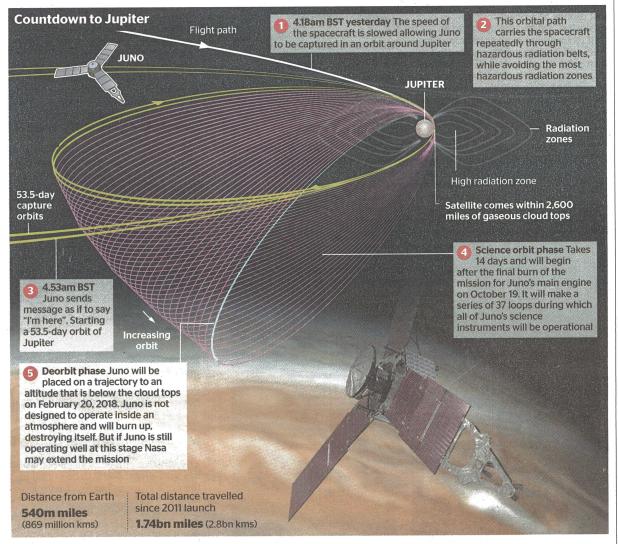
\$1.1 billion mission's tor, raising his hands he hardest thing Nashouted to his team. Juno's project manntout of the contin-Nasa would have t of a failure. "Guess d that any more," he rough tones, Juno vas a song of perfec-

second spacecraft to it and will fly 3,000 gas giant's cloud tops sor, Galileo, which to 2003. Making 37 through Jupiter's belts over an 18vill gather data that light on the origins ne planet, and of the

ople who designed, d *Juno*, and the 300 probe's 159,000mph n into Jupiter's orbit pisode. At such dis-48 minutes to reach at if any distress calling *Juno's* 35-minute old be too late for at JPL in California out it.

ecisely the right spot ight moment would loss of the mission, up 15 years ago, put rs ago, and launched

ening, Mr Bolton had h his children to preossibility of disaster.





Scott Bolton, left, celebrating Juno's success with his colleagues at Nasa

"My kids are 12 and 13 and their whole life has been *Juno*, basically," he ex-

Carried aboard the probe are three Lego figurines of the Roman god Jupiter, his wife Juno, and the Italian physicist Galileo Galilei, who in 1610 revolutionised astronomy with his realisation that Jupiter had its own orbiting moons. Galileo's discovery that planets other than Earth had satellites changed humanity's understanding of its place in the Universe.

A time-lapse video of images taken by Juno's camera as it closed in on Jupiter from a distance of ten million miles, released by Nasa yesterday, gave humanity its first glimpse of Galileo's theory, showing the Galilean moons in motion around the planet — a phenomenon never before captured.

Juno's insertion required it to with-stand vast radiation onslaughts and a monstrous debris field whipped up by the planet's 28,273mph spin, risks that will be present throughout its mission.

Guy Beutelschies, director of inter-planetary missions at Lockheed Martin Space Systems, which built *Juno*, described the insertion as "a precisely choreographed dance at blazing speeds with the largest, most intense planet in our solar system".

"There's a saying, 'It's not rocket science,' he said. "Well today, yeah, it really was rocket science."

Cern seeks your help to make next discovery

Spencer Hazel

It is one of the most technologically advanced laboratories in the world with the most sophisticated data processing software ever devised. Yet the latest tool enlisted by theoretical physicists at

Cern is rather less hi-tech: you.
Four years after confirming the existence of the Higgs boson, the team behind the discovery is seeking help from the public to analyse some 60,000 images and spot anomalies that Cern's global network of computers may have

Alan Barr of the University of Oxford leads the "Higgs Hunters" initiative. "This is exactly the sort of image classification problem that the human eye and the human brain are very good at

and the human brain are very good at doing, and which computer algorithms might not be well designed for," he said. As well as improving the algorithms, volunteers at www.higgshunters.org look out for unusual events. "This is something that is very hard to explain to a computer," Professor Barr said. "People are very good at saying, "This one looks very different," or "This is weird."

One of the things he and his colleagues hope will be found are previously undiscovered particles.
"There is this new speculative theory

that suggests that sometimes the Higgs boson might go pop," Professor Barr said. "Not to things we already know about, but to lighter Higgs bosons, things that are a bit like itself, that we have never seen before. Things which might exist in this new theory, and which might therefore exist in the real

These "baby Higgs bosons", if they exist, live a little longer than the Higgs boson before they degrade, but not before travelling far enough through

the particle detector to leave a characteristic, observable trace.

Confirming the existence of the Higgs boson, a particle hypothesised to give other particles mass, was hailed as one of the biggest scientific discoveries of the century and led the 2013 Nobel prize for Physics to be awarded to

François Englert and Peter Higgs.
Professor Barr hopes that people
power will drive the next discovery: "As [Isaac] Asimov suggests, the most interesting thing to hear in science is not 'Eureka!' but 'That looks funny'."

court fight over his £20m legacy

te interior designer is challenging the on fortune equally ming it was changed

from dementia. esigned the first-class E2 and Harry's Bar nged his will to give his two children six ath at the age of 92 in

will had left his a's half of the estate r an income but with to her older brother, heirs on her death.

for Mr Inchbald, 57, urt that the designer ing from dementia the earlier will. He claimed that Mr Inchbald was worried that his sister, 56, would not be able to cope with such a large amount of

Mr Inchbald says that his father's valuable collection of antique clocks had also been promised to him

Ms Inchbald told Judge John Martin, QC: "Courtenay was involving himself in my father's affairs and what my father should do. There was always an edge, growing up with Courtenay, that

he had to have more."

The siblings were the product of Mr Inchbald's first marriage to Jacqueline Duncan, which ended in divorce in

Ms Inchbald told the High Court that her father had been mean and she felt uncomfortable being around him. She liked to visit when his housekeeper was at home to act as a buffer.

"My father wasn't mean to me, he was

mean generally," she told the High Court. Richard Wilson, QC, for Mr Inchbald, said that the change of will had probably been "instigated" by Duncan, who wanted to protect daughter's interests.

He said that Inchbald had been suffering from dementia and did not "know or approve of" the contents of the new will.

Mr Wilson said that by the time the new will was written Mr Inchbald's relationship with his mother



with their mother, Jacqueline

had broken down. He said: "She was very close to Amanda and was motivated by her sense that she needed to protect Amanda's interests. She had, since at least 1996, encouraged the deceased to divide his estate equally between Amanda and

Courtenay."
Mr Wilson suggested to Ms Inchbald that her father had been worried about her ability to cope with a large amount of money. She said an idea like that must have been suggested by others. "I don't think my father came up with this thinking on his own," she said.

Peter John, representing Ms Inch-bald, said that the 2007 will mirrored one that her father had made 20 years earlier. "Far from the suggested conspiracy, here is a man very content, having overview of his assets, to make a will which brings equality to both his offspring," he said

He added that Mr Inchbald was trying to make "the mundane appear

sinister and the reasonable appear unreasonable".

The hearing continues.