

MailOnline

Listen to the lightning storms of Mars and the 'ice volcanoes' of Saturn's moon Titan: Scientists simulate sounds of solar system

- **Scientists use atmosphere data to simulate sounds of Mars, Venus and Saturn's moon Titan**
- **Storms sound radically different due to gases on each planet**
- **Sounds of weather including lightning on Mars and 'ice volcanoes' on Titan**
- **Dense gassy atmosphere on Venus would turn voice into a growl - and make people seem smaller**

By [Rob Waugh](#)

PUBLISHED: 16:08, 2 April 2012 | **UPDATED:** 16:41, 2 April 2012

Mars has lightning storms, avalanches and even dust devils, just like Earth - but its thin atmosphere of carbon dioxide would mean they sounded very different.

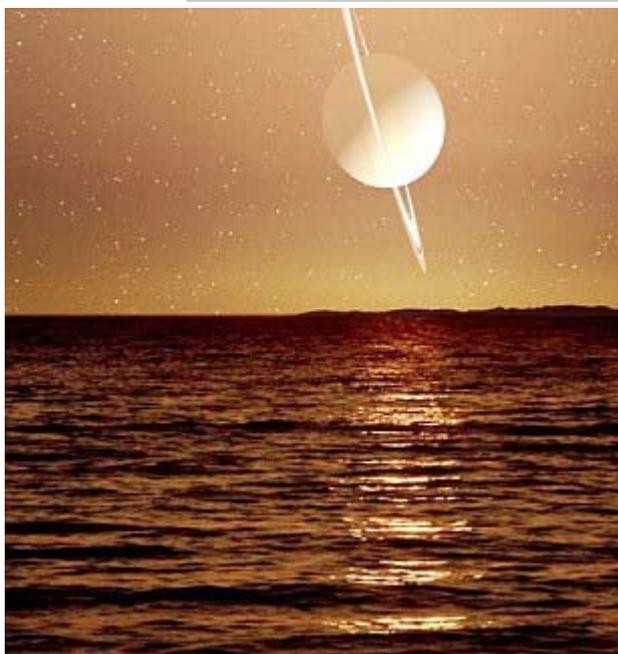
A team from the University of Southampton used physics and mathematics to work out what the violent weather of our solar system might sound like - capturing the crashing sounds of lightning on Venus, whirlwinds on Mars and ice volcanoes on Saturn's largest moon, Titan.

Professor Tim Leighton, of the university's Institute for Sound and Vibration Research, said: 'We are confident of our calculations.'

Scroll down to hear



On Venus, the pitch of your voice would become much deeper. That is because the planet's dense atmosphere means that the vocal cords vibrate more slowly through this 'gassy soup'



This artist's rendition shows a lake of methane on Titan - scientists simulated sounds from Saturn's icy moon

They have also modelled the effects of different atmospheres, pressures and temperatures on the human voice on Mars, Venus and Titan, and found that on Venus humans would sound like bass Smurfs.

This ignores, of course, certain basic facts about Venus - that it's 480 degrees Celsius on the surface, for a start, and that the pressure is 96 times higher than Earth.

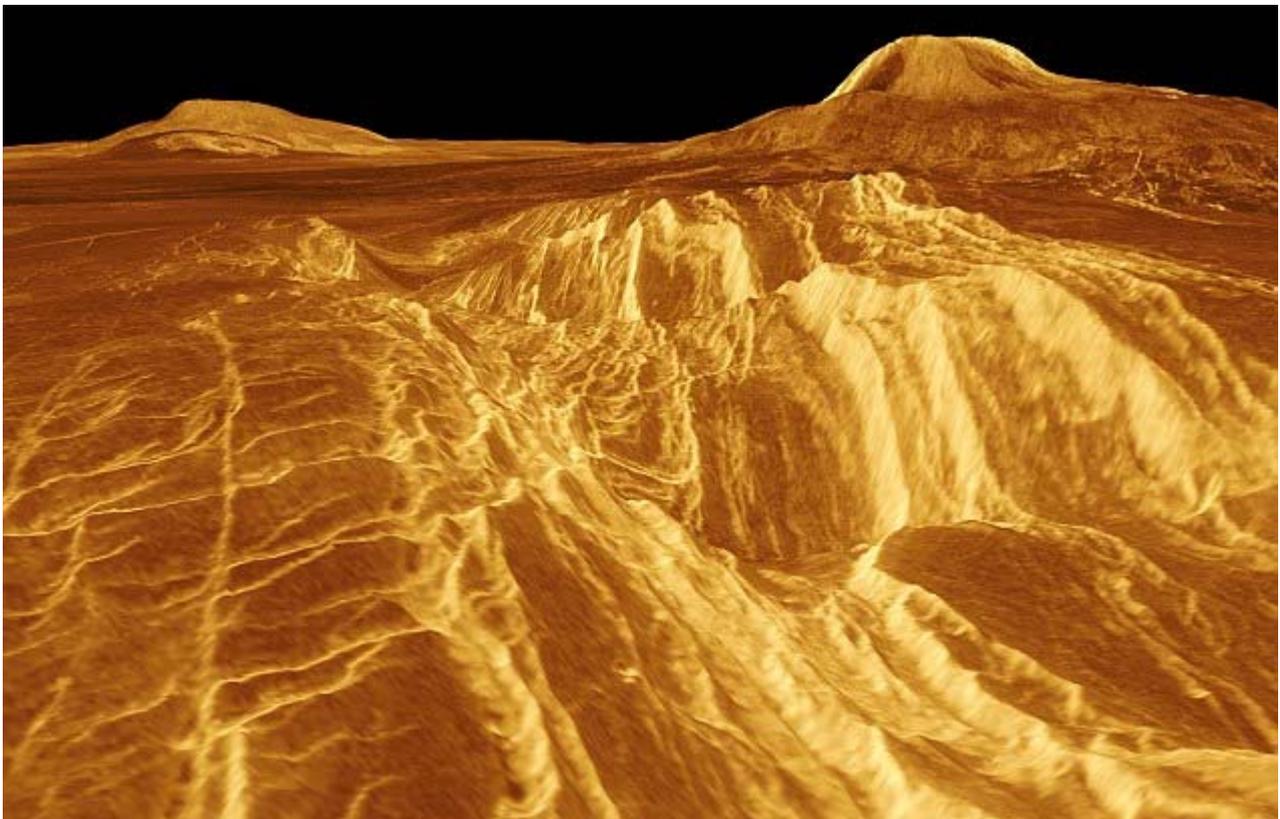
A real human would sound like a dead Smurf. But Leighton's team modelled the effects purely in terms of physics, working out the effects on the sound of a human voice.

'We have been rigorous in our use of physics taking into account atmospheres, pressure and fluid dynamics.

'On Venus, the pitch of your voice would become much deeper. That is because the planet's dense atmosphere means that the vocal cords vibrate more slowly through this 'gassy soup'.

'However, the speed of sound in the atmosphere on Venus is much faster than it is on Earth, and this tricks the way our brain interprets the size of a speaker (presumably an evolutionary trait that allowed our ancestors to work out whether an animal call in the night was something that was small enough to eat or so big as to be dangerous).

'When we hear a voice from Venus, we think the speaker is small, but with a deep bass voice. On Venus, humans sound like bass Smurfs.'



When we hear a voice from Venus, we think the speaker is small, but with a deep bass voice. On Venus, humans sound like bass Smurfs

Prof Leighton, who has been working on the sounds of space for the last ten years and has previously made the sound of a methane waterfall in space, added: 'I'm interested in what music would sound like in space.

'If astronauts are based on Mars for several months, they might just take musical instruments along, or build one there. What would they sound like?

'As a scientist, I reckon the most exciting thing to work on is a completely new idea, something that's never been done before.'

Despite many years of space exploration, scientists have no evidence of the sound of other planets.

While most planetary probes have focused on imaging with cameras and radar and a couple have carried microphones, none of them successfully listened to the sound of another world.

The sounds will be added to the Flight Through The Universe shows this Easter at the Astrium Planetarium at INTECH near Winchester, Hampshire.

MOST READ NEWS

- [Previous](#)
- [1](#)
- [2](#)
- [3](#)
- [Next](#)



- ['Put your children first - not having a good time!': Wannabe...](#)



- [Heroic Harry saves life of unconscious rival after dramatic...](#)



- [Princess Diana and her barefoot boys: Lord Snowdon portrait...](#)



- [Social workers seize baby in French swoop: Anguish of...](#)



- [Stunning photos show TEN-STORY tree house that makes Swiss...](#)



- [Inside the mansion of squalor: Pictures show how £4.2m house...](#)



- [Stick to the speed limit to conserve fuel: The latest...](#)



- [\\$105million is all MINE: McDonald's worker scoops Mega...](#)



- [Putin targets foes with 'zombie' gun which attack victims'...](#)



- [Introducing Sgt Pepper 2012 style...Forty-five years on and...](#)



- [Disgusted voters give three main party leaders 'worst poll...](#)



- [She's an active girl of four weighing 2st 13lb. But to...](#)

Comments (2)

- [Newest](#)
- [Oldest](#)
- [Best rated](#)
- [Worst rated](#)

[View all](#)

"On Venus humans would sound like bass Smurfs'. Actually they wouldn't; they would just make little sizzling sounds.....

- Cmdr. Peter Quincy Taggart, Thermia, 02/4/2012 19:21

Click to rate Rating (0)

[Report abuse](#)

WHO IS PAYING FOR THIS???

- Thames, London, 02/4/2012 19:02

Click to rate Rating 1

[Report abuse](#)

The views expressed in the contents above are those of our users and do not necessarily reflect the views of MailOnline.

[Today's headlines](#)

[Most Read](#)

- [IBM building most powerful computer in history to unravel origin of the universe](#)
- [Bus-sized asteroid flies past Earth - so close it flew UNDER the moon](#)
- [Prices for eBooks on Kindle could tumble as deal in Apple book price-fixing case is just 'weeks away'](#)
- ['Global warming started over 100 years ago': New temperature comparisons using ocean-going robots suggest climate change began much earlier than previously thought](#)
- [Move over Mickey Mouse? Angry Birds to become a weekly television series this year - and a full-length film is in the works](#)
- [Did poor workmanship sink the Titanic? Physicist claims missing rivets were crucial to a 'cascade' of events that sank liner](#)
- [Listen to the lightning storms of Mars and the 'ice volcanoes' of Saturn's moon Titan: Scientists simulate sounds of solar system](#)
- [Get RIGHT under nature's skin: See animals turned inside out as Body Worlds creator von Hagens brings his 'anatomical safari' to the UK](#)
- [Teeny tiny Tower Bridge: 3D-nanoprinting creates objects as small as a GRAIN OF SAND \(but maintains attention to detail\)](#)
- [Could Facebook tell you which of your friends has an STD?](#)
- [Camera that can 'see' radiation will assess danger levels at stricken Fukushima nuclear reactor](#)
- ['No need to ever pump up your bike tyres again': Invention claims to inflate them as you ride along \(it even shuts itself off when it's done\)](#)
- [It ISN'T 'who you know': Coming from a well-connected family helps get a job - but success is down to your own brain power](#)
- [Is it snowing microbes on Saturn moon? Cassini probe captures incredible images of icy geysers that may be full of life](#)
- ['Cure for obesity' may not be for the squeamish: Scientists hunt for 'clean' gut bacteria in faeces extracted from mummies](#)
- [MORE HEADLINES](#)

- ['Beer goggles' fool women the most: Scientists discover why people are more attractive after a few drinks](#)
- [Prices for eBooks on Kindle could tumble as deal in Apple book price-fixing case is just 'weeks away'](#)
- [Bus-sized asteroid flies past Earth - so close it flew UNDER the moon](#)
- [IBM building most powerful computer in history to unravel origin of the universe](#)
- ['No need to ever pump up your bike tyres again': Invention claims to inflate them as you ride along \(it even shuts itself off when it's done\)](#)
- [Did poor workmanship sink the Titanic? Physicist claims missing rivets were crucial to a 'cascade' of events that sank liner](#)
- [Move over Mickey Mouse? Angry Birds to become a weekly television series this year - and a full-length film is in the works](#)
- [Camera that can 'see' radiation will assess danger levels at stricken Fukushima nuclear reactor](#)
- [Smarter phones? Wealthy people download half as many apps as the rest of us - because they're too busy to play games or Tweet](#)
- ['Global warming started over 100 years ago': New temperature comparisons using ocean-going robots suggest climate change began much earlier than previously thought](#)
- [New sat-nav vibrates the sides of your steering wheel instead of saying instructions - and could save dozens of lives a year](#)
- [Get RIGHT under nature's skin: See animals turned inside out as Body Worlds creator von Hagens brings his 'anatomical safari' to the UK](#)

- [How our brains are wired: Scanner reveals inner workings in stunning new detail](#)
- [Google's 'Do a barrel roll' spins out of control on Twitter as millions are urged to take a tumble](#)
- [Teeny tiny Tower Bridge: 3D-nanoprinting creates objects as small as a GRAIN OF SAND \(but maintains attention to detail\)](#)
- [MOST READ IN DETAIL](#)

Ads by Google:

[Compare Solar Installers](#) Find Local Solar Panel Installers. Compare Free Solar Panel Quotes! [Solvari.co.uk/Solar-Panels](#)
[Free Solar Panels](#) Generate free electricity with our free solar panels. [www.ashadegreener.co.uk](#)

[Registered to Vote?](#) Don't lose your vote on 3rd May. Registration deadline: 18th April. [www.aboutmyvote.co.uk](#)

GADGET REVIEWS

[Nike's brand new FuelBand](#)

['If you have a body, you are an athlete'; it's the principle upon which Nike was founded. This product more than most encapsulates that.](#)

[Scosche myTrek Wireless Pulse Monitor](#)

[Monitors your pulse and sends real-time data via wireless to its app on your iPhone and iPod Touch](#)

[Braun Oral-B Triumph 5000 Electric Toothbrush](#)

[The toothbrush with a wireless SmartGuide that tells you how well you've cleaned your teeth.](#)

['Play' Multi-Message Video Pad](#)

[It's mooted as the 'ultimate video memo'. And some say it will sound the death knell for post-it notes. Above all, it's fun to use.](#)

[Angry Birds iPod & iPhone Speaker Dock](#)

[For fans of the 350-million selling game, this is possibly the most exciting speaker system to ever be invented.](#)

Ads by Google:

[4kW Solar PV Offer £7,400](#) 250 Mono Panels, 25 Year Warranty, Free EPC Cert & Insulation

Upgrade. [www.solaessence.co.uk/solar-pv](#)

[Free Solar Panels](#) Generate free electricity with our free solar panels. [www.ashadegreener.co.uk](#)

[Compare Solar Installers](#) Find Local Solar Panel Installers. Compare Free Solar Panel Quotes! [Solvari.co.uk/Solar-Panels](#)

[Generate your own energy](#) Install solar panels & earn £1000 a year from feed-in tariff in

2012. [www.FindEnergySavings.co.uk](#)

[Registered to Vote?](#) Don't lose your vote on 3rd May. Registration deadline: 18th April. [www.aboutmyvote.co.uk](#)

Published by Associated Newspapers Ltd

Part of the Daily Mail, The Mail on Sunday & Metro Media Group

[© Associated Newspapers Ltd](#)

