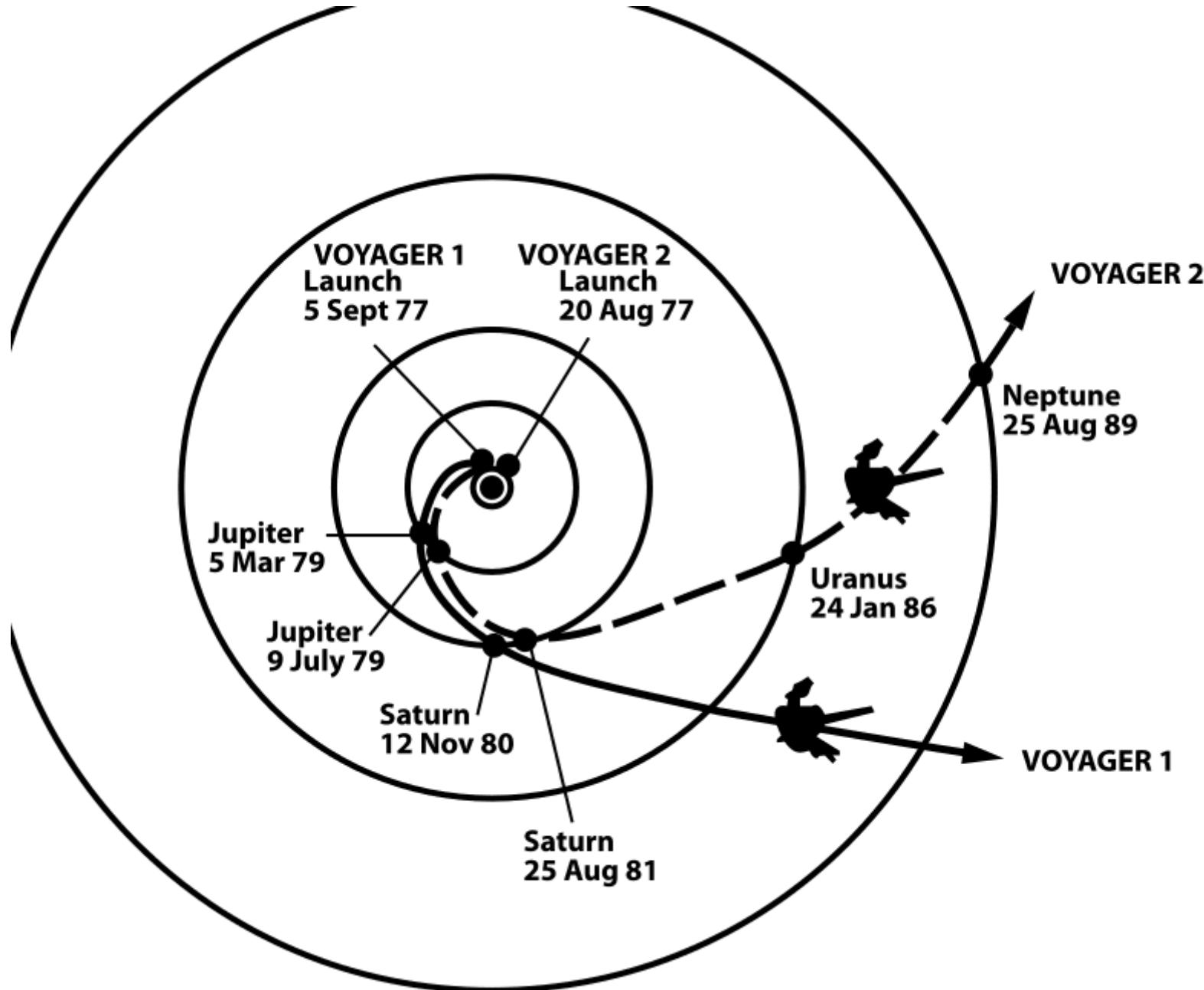


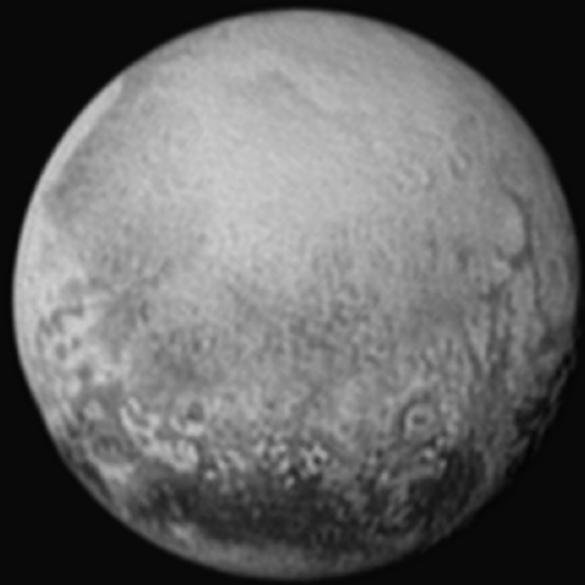
# Viajes especiales

Jaime E. Forero Romero  
Universidad de los Andes  
Curso Astronomía Popular  
Septiembre 2015



Wikicommons: The trajectories that enabled NASA's twin Voyager spacecraft to tour the four gas giant planets and achieve velocity to escape the Solar System. Source: [http://solarsystem.nasa.gov/multimedia/display.cfm?IM\\_ID=2143](http://solarsystem.nasa.gov/multimedia/display.cfm?IM_ID=2143)

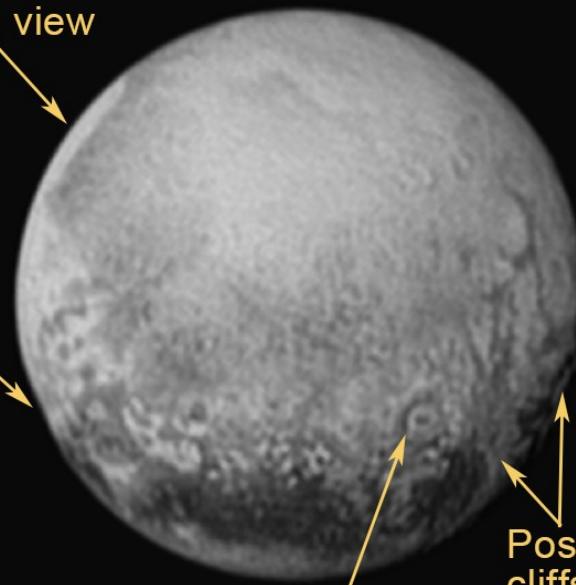
# Pluto



600 miles (1000 km)

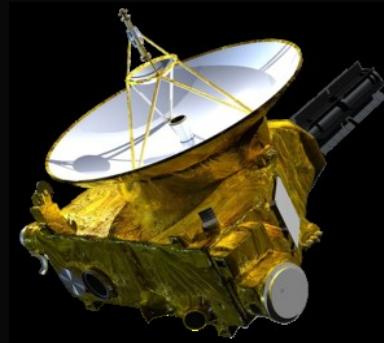
Bright "heart"  
rotating into view

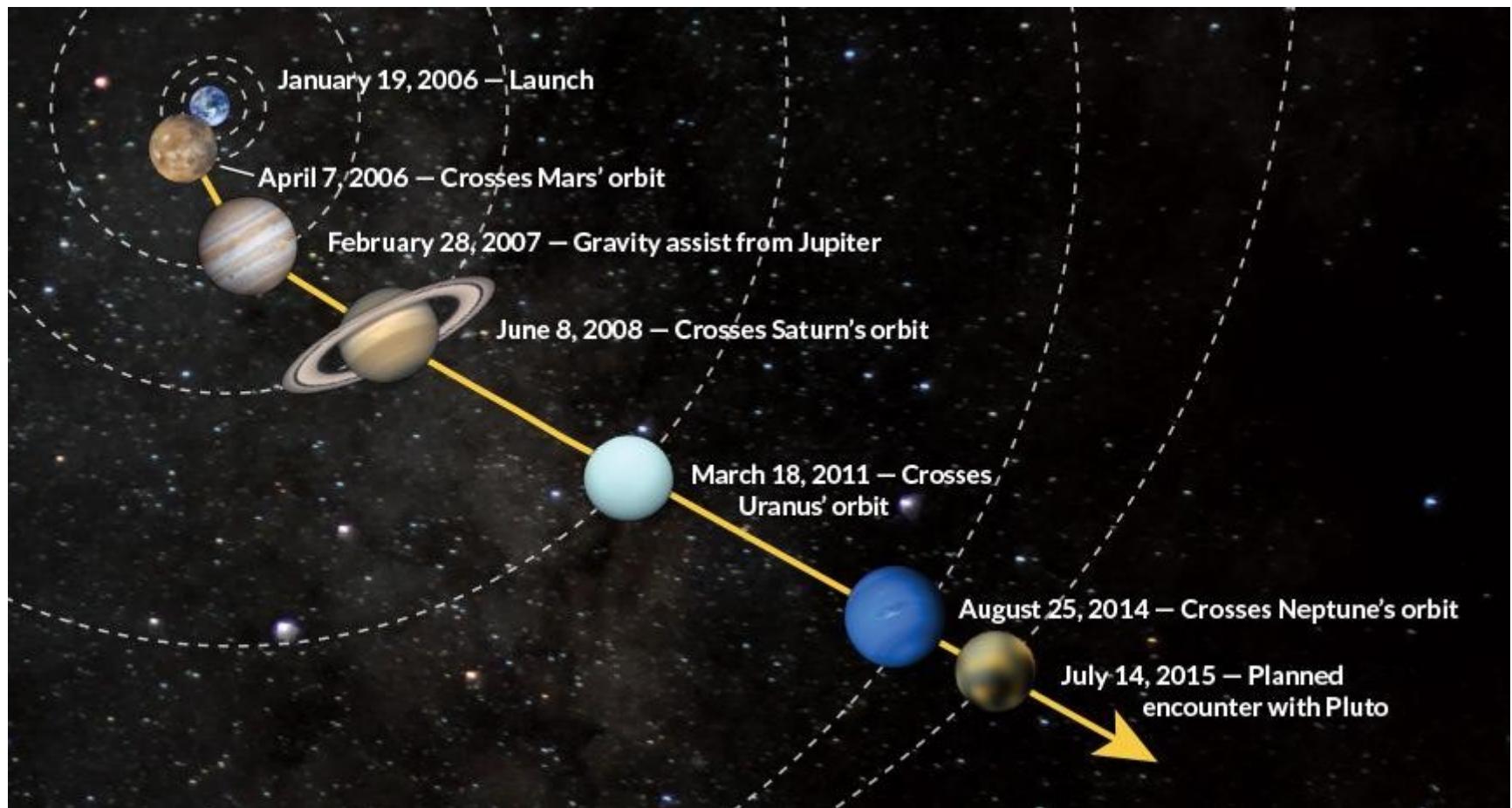
Dark area  
rotating  
into view

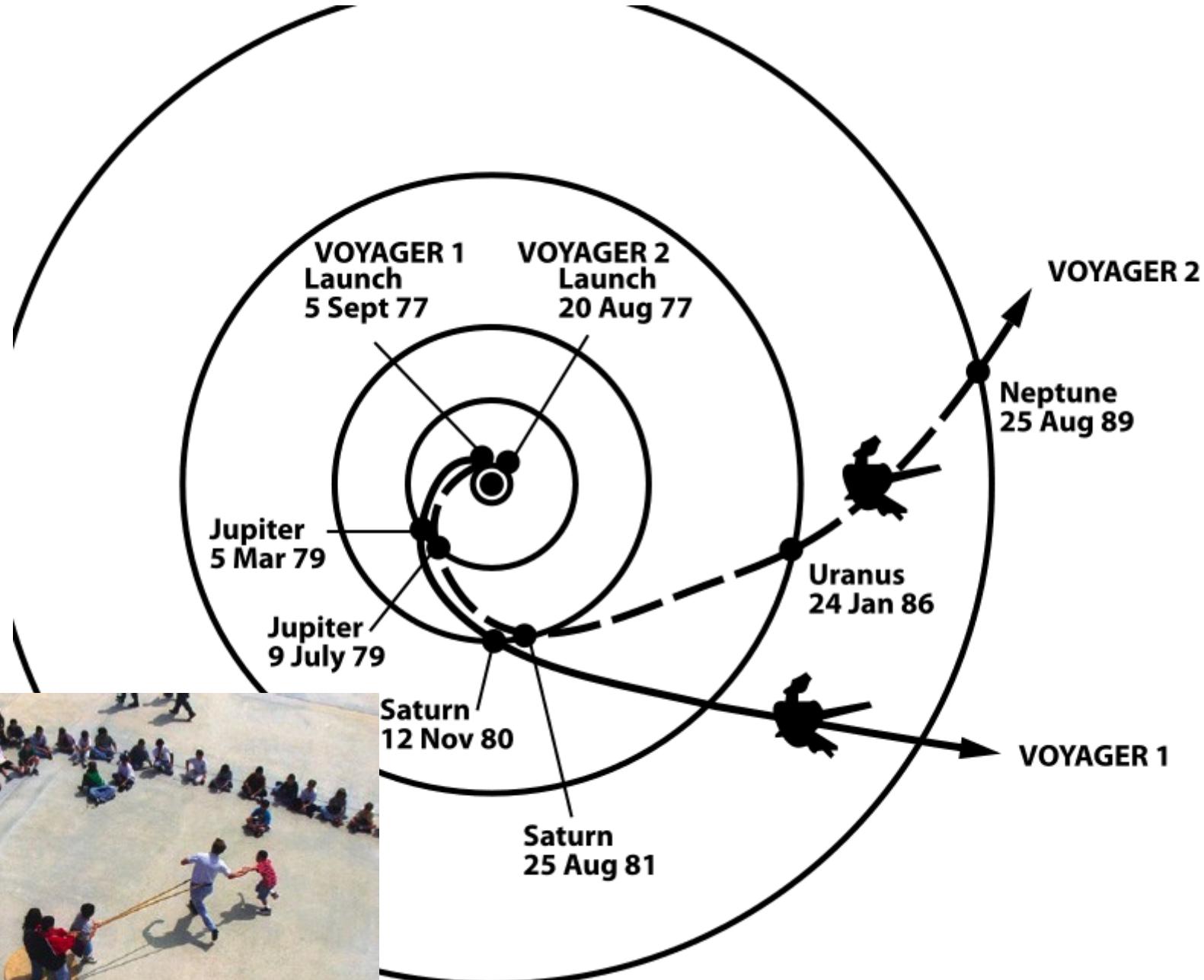


Circular feature  
(possible crater)

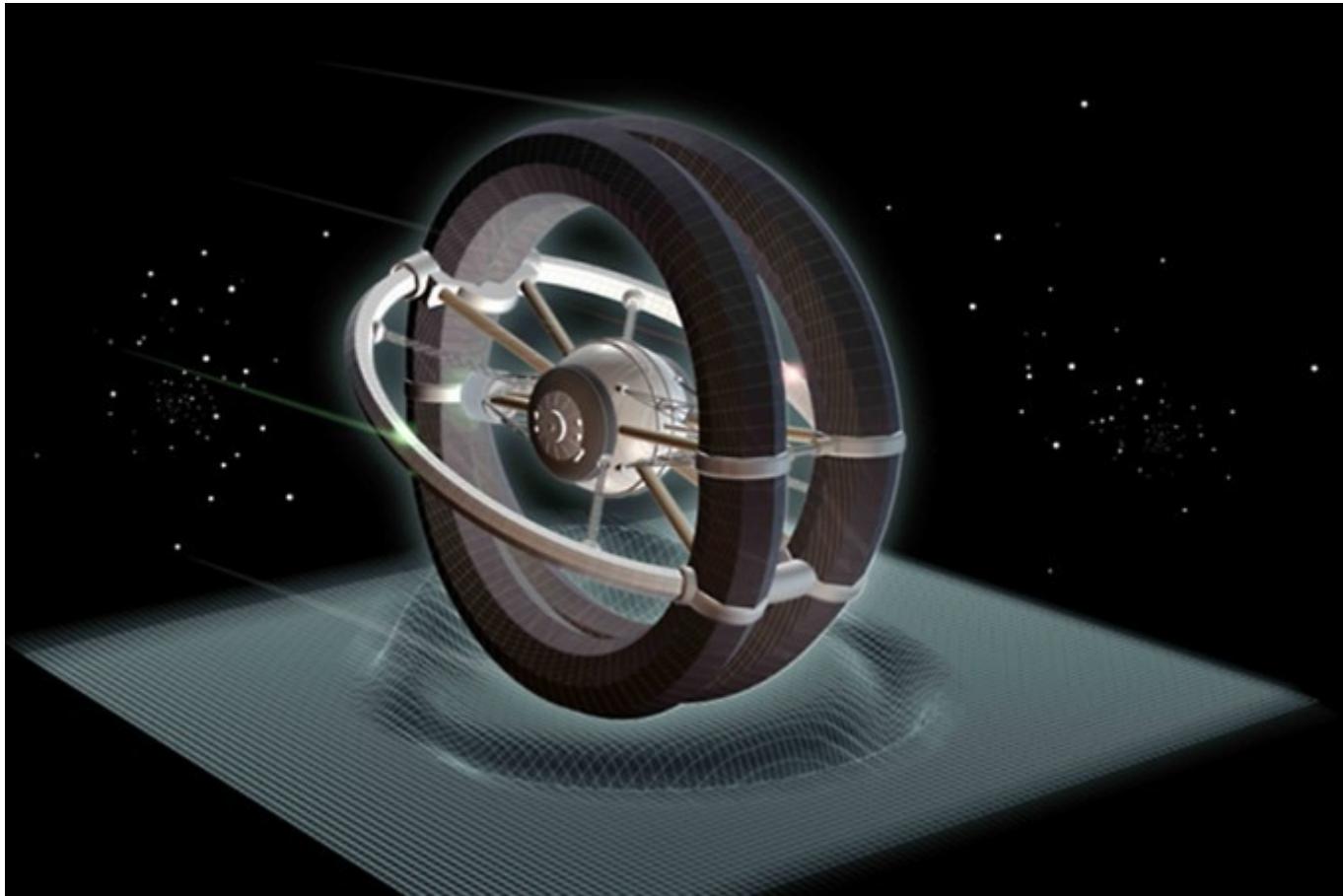
Possible  
cliffs





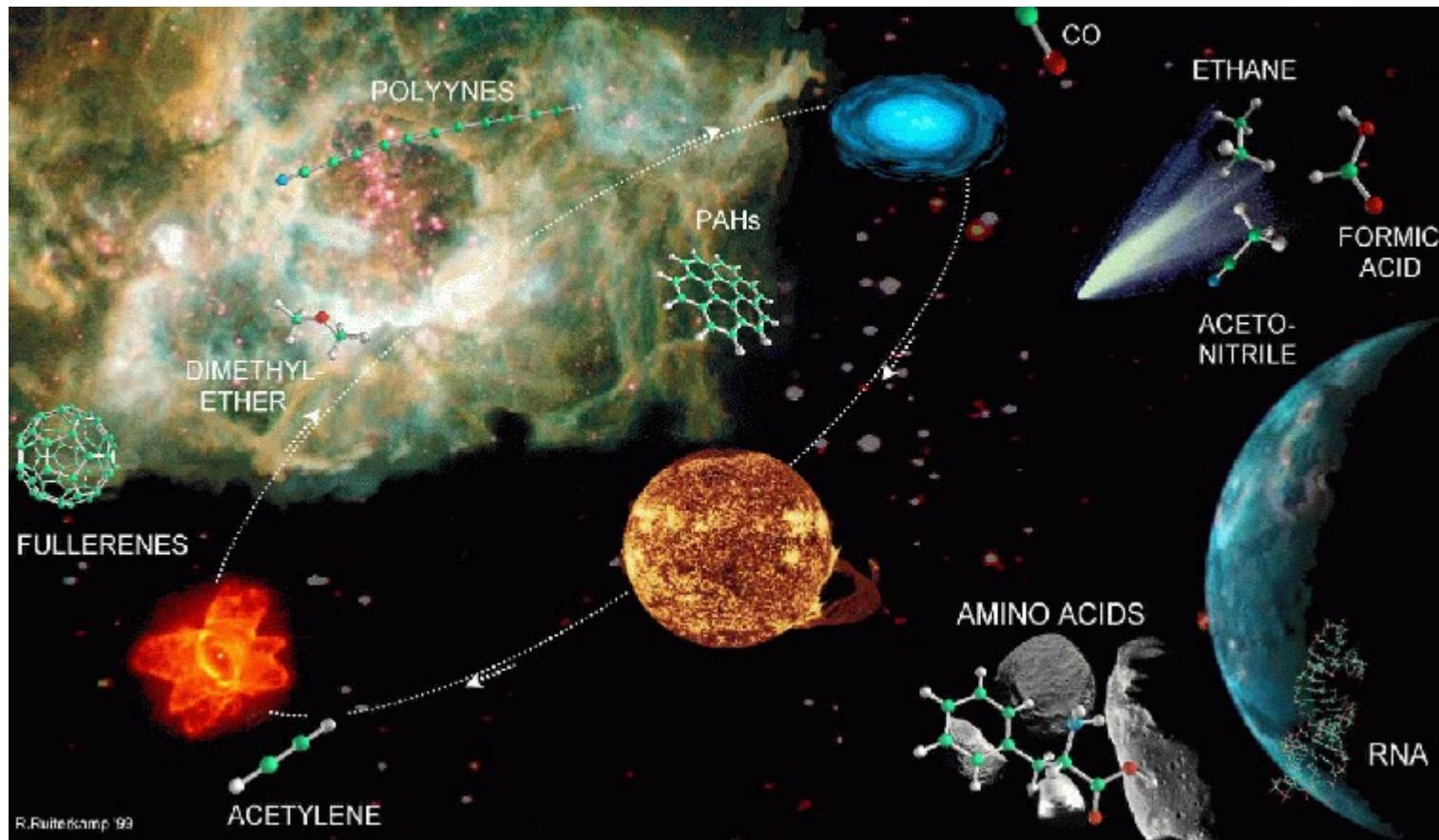


Wikicommons: The trajectories that enabled NASA's twin Voyager spacecraft to tour the four gas giant planets and achieve velocity to escape the Solar System. Source: [http://solarsystem.nasa.gov/multimedia/display.cfm?IM\\_ID=2143](http://solarsystem.nasa.gov/multimedia/display.cfm?IM_ID=2143)



<http://www.icarusinterstellar.org>

# astrobiología





Space probes have explored the main bodies of our solar system, revealing varied and distinctive worlds - but worlds unpropitious for life. There may once have been living organisms on Mars (and there may be life on the moons of Jupiter and Saturn) but there are no “Martians” of the kind familiar from science fiction.

Within our solar system, Earth is the only Goldilocks planet - not too hot and not too cold for water to exist. But the prospects of finding advanced life brighten a billion-fold when we extend our horizons to the other stars - far beyond the range of any probe we can construct today. The most exciting recent breakthrough in astronomy has been the realisation that most stars are orbited by retinues of planets, just like our sun is. And that there are literally billions of Earth-like planets in our Milky Way galaxy.

Would these other planets have lush biospheres? Or is our Earth unique, all others being sterile and lifeless? We know too little about how life began, and what evolutionary paths it might take, to answer this basic question.

**Let's listen out for alien life – and remember we might not understand it**

Martin Rees

Far-future life and intelligence could be as different from us as we are from a bacterium. Life from Earth could spread through the entire galaxy, evolving into a teeming complexity far beyond what we can even conceive. If so, our tiny planet - this pale blue dot floating in space - could be the most important place in the entire cosmos.

Humans could then be less cosmically modest - our actions would resonate far beyond the Earth. Either way, our cosmic habitat - this immense firmament of stars and galaxies - seems tuned to be an abode for life. From a simple big bang, amazing complexity has unfolded, leading to our emergence.

Even if we are now alone in the universe, we may not be the culmination of this drive towards complexity and consciousness. But thanks to the Breakthrough Initiative, there will be a serious scientific effort to probe these fundamental mysteries which all can follow with fascination.

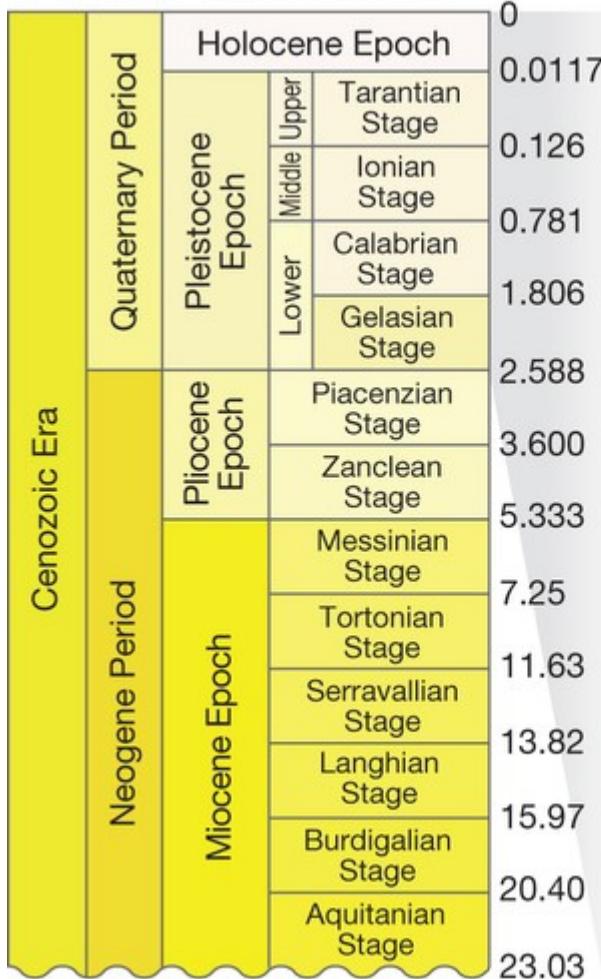
**Let's listen out for alien life – and remember we might not understand it**

Martin Rees

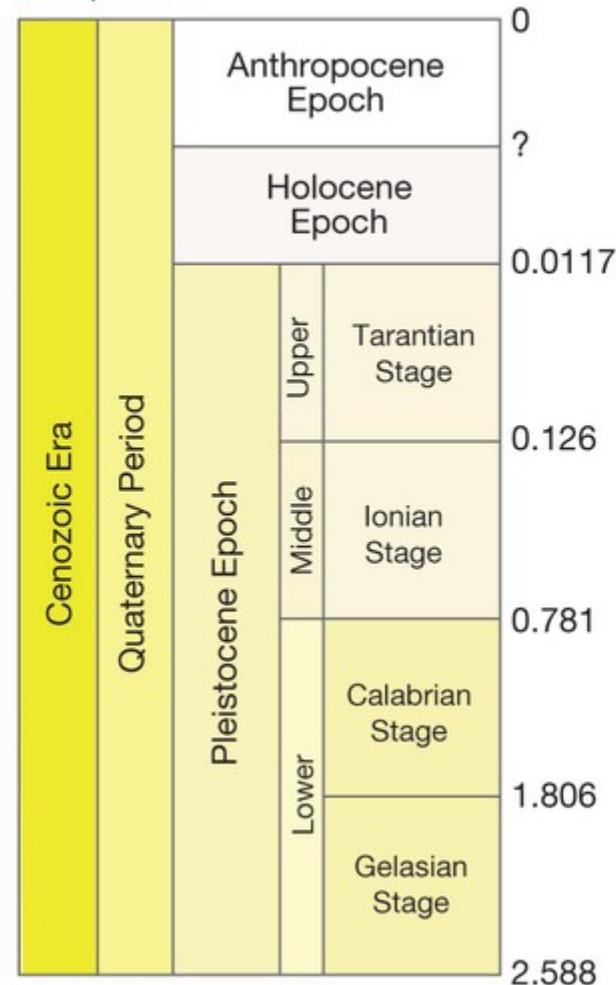
Launched on Monday at the Royal Society in London, with the Cambridge cosmologist Stephen Hawking, the Breakthrough Listen project has some of the world's leading experts at the helm. Among them are [Lord Martin Rees](#), the astronomer royal, [Geoff Marcy](#), who has discovered more planets beyond the solar system than anyone, and the veteran US astronomer [Frank Drake](#), a pioneer in the search for extraterrestrial intelligence (Seti).

[Stephen Hawking](#) said the effort was “critically important” and raised hopes for answering the question of whether humanity has company in the universe. “It’s time to commit to finding the answer, to search for life beyond Earth,” he said. “Mankind has a deep need to explore, to learn, to know. We also happen to be sociable creatures. It is important for us to know if we are alone in the dark.”

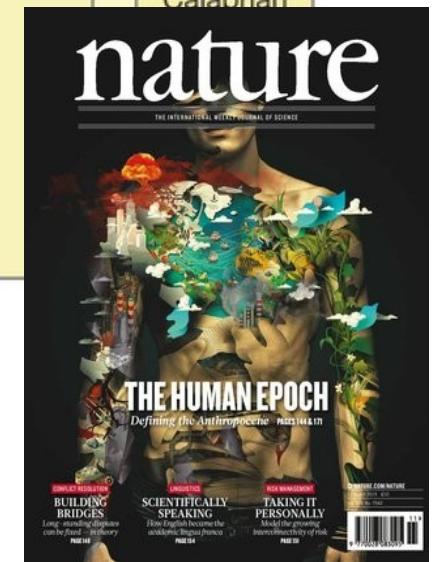
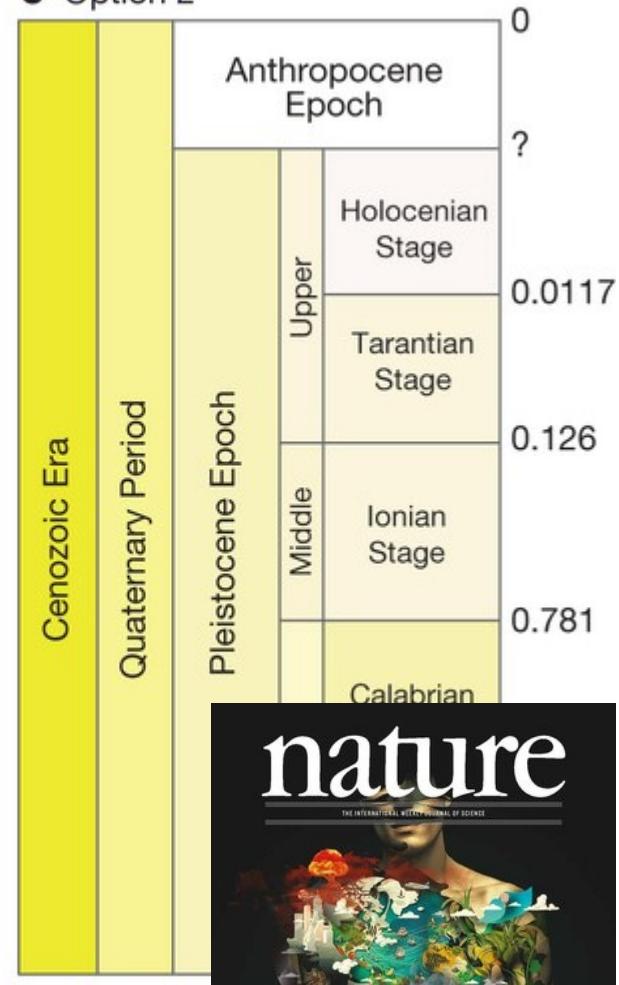
**a** Geologic Time Scale 2012

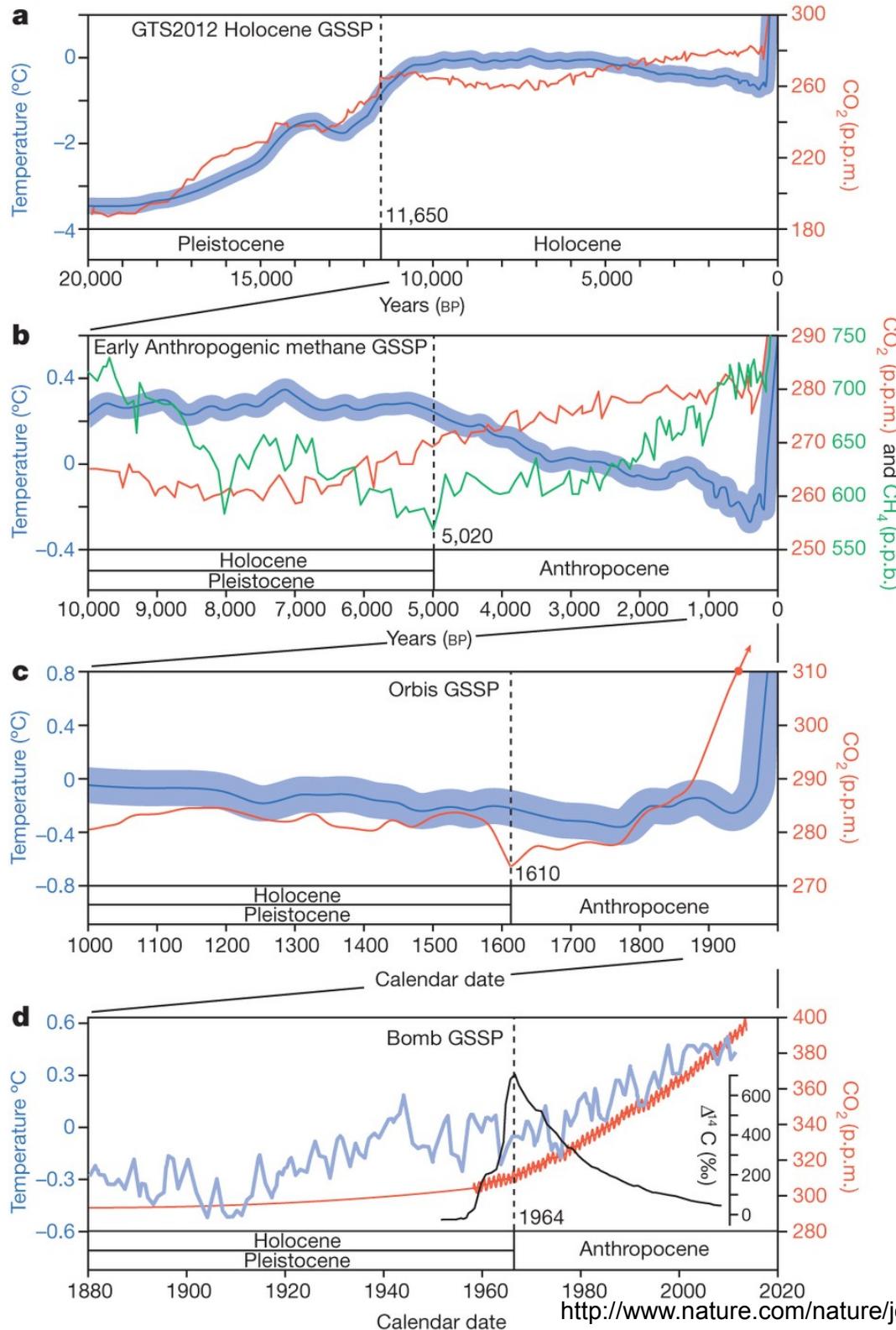


**b** Option 1



**c** Option 2





# Anthropocene: The human age

Momentum is building to establish a new geological epoch that recognizes humanity's impact on the planet. But there is fierce debate behind the scenes.

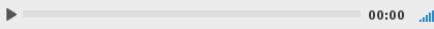
Richard Monastersky

11 March 2015

"We want to help people imagine their role in the world, which is maybe more important than many of them realize," says Wing.

## LISTEN

Simon Lewis discusses the best candidate dates to define the beginning of the Anthropocene



This provocative exhibit will focus on the Anthropocene — the slice of Earth's history during which people have become a major geological force. Through mining activities alone, humans

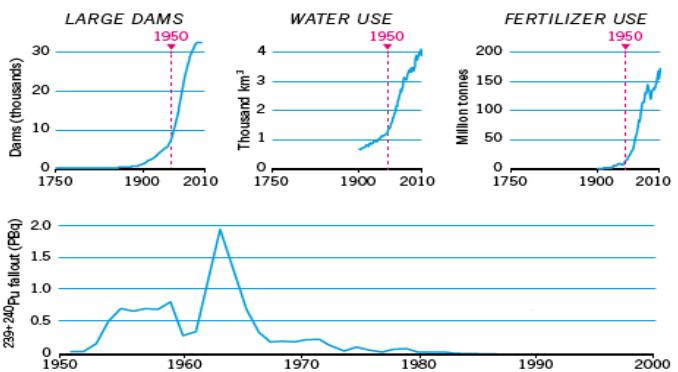
move more sediment than all the world's rivers combined. *Homo*

## Humans at the helm

Researchers are studying whether the geological timescale should be modified to include the Anthropocene, a unit of time during which humans became a major force on the planet. Some support starting the Anthropocene in the mid-twentieth century, whereas others propose much earlier dates.

### LATE-ANTHROPOCENE PROPOSAL

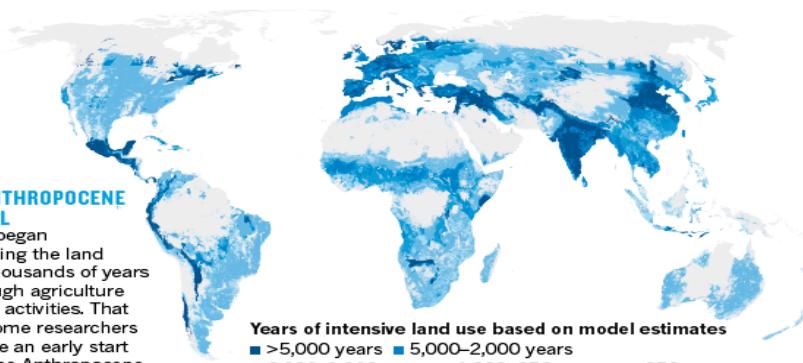
Human impacts on the environment surged in the mid-twentieth century, a trend visible in many records. That time has been called the Great Acceleration.

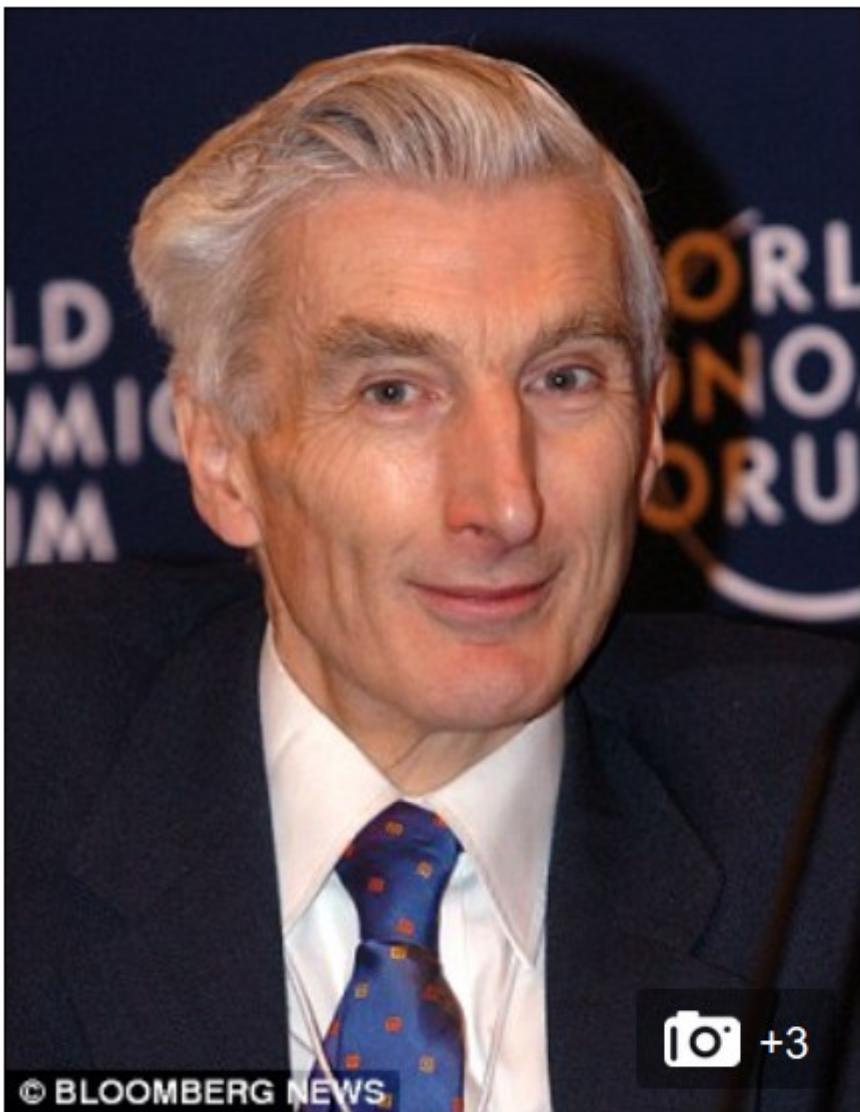


Radioactive fallout from nuclear blasts peaked in the mid-twentieth century, leaving a signal visible in sediments that has been proposed as a marker for the start of the Anthropocene.

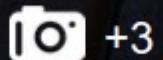
### EARLY-ANTHROPOCENE PROPOSAL

Humans began transforming the land surface thousands of years ago, through agriculture and other activities. That has led some researchers to propose an early start date for the Anthropocene.





© BLOOMBERG NEWS



**The British Astronomer Royal, Sir Martin Rees, believes that we are facing an 'inorganic post-human era' in which robot intelligence will surpass that of people, leading to humanity's ultimate destruction**



© © William Whitehurst/CORBIS



Nevertheless, 12 years ago, I wrote a book that I entitled **Our Final Century?** My publisher deleted the question-mark. The American publishers changed the title to Our Final Hour – Americans seek instant (dis)gratification. My theme was this: our Earth is 45 million centuries old, but this century is special. It's the first when one species – ours – can determine the biosphere's fate.

**How soon will robots take over the world? de Sir Martin Rees.**

In the years since, a few forecasts have somewhat firmed up: the world is becoming more crowded – and warmer. There will be about 2 billion more people in 2050, and their collective “footprint” will threaten our finite planet’s ecology unless we can achieve more efficient use of energy and land. But we can’t predict the path of future technology that far ahead. Today’s smartphones would have seemed magic even 20 years ago, so in looking several decades ahead we must keep our minds open to breakthroughs that may now seem like science fiction. These will offer great hopes, but also great fears.

**How soon will robots take over the world? de Sir Martin Rees.**



[http://www.huffingtonpost.com/brandong-judell/movie-review-interstellar\\_1\\_b\\_6100562.html](http://www.huffingtonpost.com/brandong-judell/movie-review-interstellar_1_b_6100562.html)

A RIDLEY SCOTT FILM

# BRING HIM HOME

MATT DAMON

## THE MARTIAN

MUSIC BY HARRY GREGSON-WILLIAMS PRODUCED BY SIMON KINBERG RIDLEY SCOTT MICHAEL SCHAEFER ADITYA SOOD MARK HUFFAM

IN REAL D 3D  
& DIGITAL 3D  
SEE IT ON  
LARGE FORMAT

BASED UPON THE NOVEL BY ANDY WEIR  
SCREENPLAY BY DREW GODDARD DIRECTED BY RIDLEY SCOTT

#TheMartian  
TheMartianMovie.com

NOVEMBER



<http://www.joblo.com/movie-posters/the-martian-2015>





Its light is produced by a great fire.



Trailer Aluna: <https://www.youtube.com/watch?v=mHQ4FfgBBXI>



Fuente: Wikimedia Slavoj Žižek in Liverpool, cropped version of  
[Image-Slavoj Žižek in Liverpool.jpg](#)

Theorist Slavoj Zizek ends on an optimistic note, citing the recent uprisings in Greece, Egypt and New York as a hope for the future.

*The first step of freedom is not just to change reality to fit your dreams; it's to change the way you dream. And again this hurts because all satisfactions we have come from our dreams.*

*...How come it is easier for us to imagine the end of all life on earth, an asteroid hitting the planet, than a modest change in our economic order? Perhaps the time has come to set our possibilities straight and to become realists by way of demanding what appears as impossible in the economic domain. The surprising explosion of Occupy Wall Street protests, the mass mobilization in Greece, the crowds on Tahrir Square, they all bear witness for the hidden potential for different future. There is no guarantee that this future will arrive. No train of history on which we simply have to take ride. It depends on us, on our will.*

<http://www.critical-theory.com/watch-the-final-scene-from-zizeks-perverts-guide-to-ideology/>

# Definiciones de vida



<https://twitter.com/jhalifax/status/565502475676164097>

Mind and @mindandlifeorg in 1992, with Dalai Lama, Francisco Varela, Thupten Jinpa, Alan Wallace, me and others

# Definiciones de vida inteligente

# Cognitive Enhancement: Methods, Ethics, Regulatory Challenges

Nick Bostrom · Anders Sandberg

[www.nickbostrom.com](http://www.nickbostrom.com)

Received: 12 August 2006 / Accepted: 25 March 2009 / Published online: 19 June 2009

© Springer Science+Business Media B.V. 2009

**Abstract** Cognitive enhancement takes many and diverse forms. Various methods of cognitive enhancement have implications for the near future. At the same time, these technologies raise a range of ethical issues. For example, they interact with notions of authenticity, the good life, and the role of medicine in our lives. Present and anticipated methods for cognitive enhancement also create challenges for public policy and regulation.

**Keywords** Cognitive enhancement · Ethics · Human enhancement · IQ · Intelligence · Policy

# Methods of Cognitive Enhancement

- Education, Enriched Environments and General Health
- Mental Training
- Drugs
- Transcranial Magnetic Stimulation
- Genetic Modifications
- Prenatal and Perinatal Enhancement
- External Hardware and Software Systems
- Brain-Computer Interfaces
- Collective Intelligence

**"IF THE WORDS  
'LIFE, LIBERTY,  
AND THE PURSUIT  
OF HAPPINESS'  
DON'T INCLUDE  
THE RIGHT TO  
EXPERIMENT WITH  
YOUR OWN  
CONSCIOUSNESS,  
THEN THE DECLARATION  
OF INDEPENDENCE ISN'T  
WORTH THE HEMP IT WAS  
WRITTEN ON."**

**TERENCE McKENNA**

<http://likesuccess.com/author/terence-mckenna>

# CELEBRACIÓN INDÍGENA DE AGRADECIMIENTO A LA MADRE TIERRA

## EQUINOCCIO 20 DE SEPTIEMBRE DE 2015



El sentido del recorrido es rememorar la ceremonia “de correr la tierra” como lo hacían los ancestros Mhuysqas en un ritual de agradecimiento continuo a la Madre Tierra en cada uno de los lugares sagrados escogidos en relación con la conexión con cada una de las lagunas sagradas de dicha ceremonia.

# Orígenes

*Hacia el Sur*

Dramaturgia y Dirección:  
Beatriz Camargo

Realizó:  
LA VOZ ITINERANTE DEL SOL

