

# The Science behind "Trevor the Time Traveler"

Trevor and his sister Farrah are in the fifth and fourth grades. How did they get a time machine? And why does everyone think they are the key to saving the galaxy?

Is time travel possible? Are there other universes? Does life exist on other planets? Take a ride with Trevor and Farrah and explore what might be.

"I wrote this story for my kids to teach them as many of the coolest, mind blowing ideas as I could, as well as how to be a good person. But when I was done, I realized this was a fun book for adults as well. Where else will you find general relativity explained to a fifth grader in a story with wormhole jump ropes, bullies, secret agents, gamblers, dinosaurs, aliens, and a flying unicorn who can talk, read minds, and grant wishes?"

The author is a professor of mathematics and physics at Duke University. He studies black holes, dark matter, and the curvature of space and time.



Trevor the Time Traveler and the Murkian Threat

by Professor H. L. Bray

## TREVOR<sup>the</sup> Time TRAVELER and the Murkian Threat

by Professor H. L. Bray

The planet Murkos  
orbits a star here

THE ANDROMEDA GALAXY  
(1,000,000,000,000 stars)

THE MILKY WAY GALAXY  
(300,000,000,000 stars)

The planet Fruit Smoothie  
orbits a star here

YOU ARE HERE  
on the planet Earth  
orbiting the Sun

The planet Allegro  
orbits a star here.

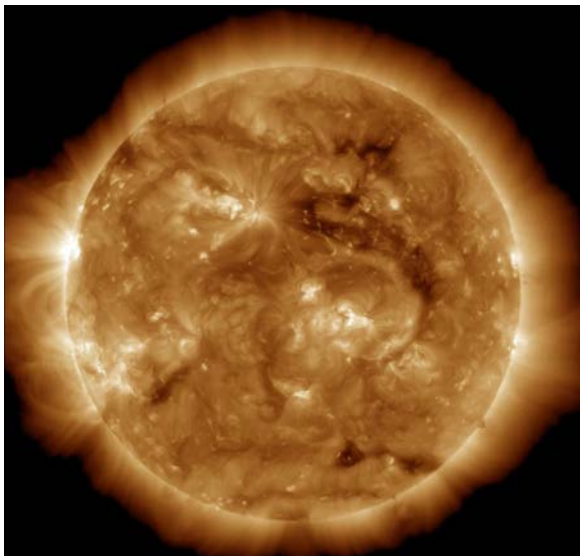
# Milky Way Galaxy look-alike Galaxy NGC 6744



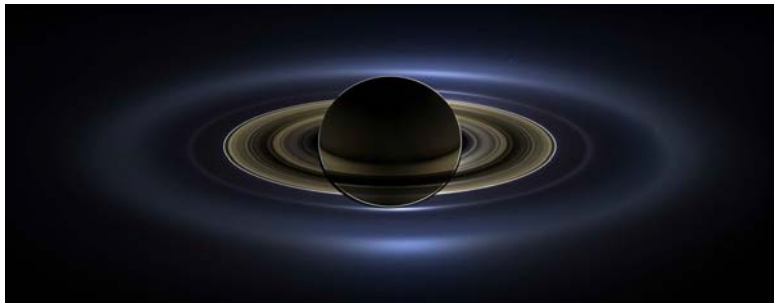
# The Andromeda Galaxy



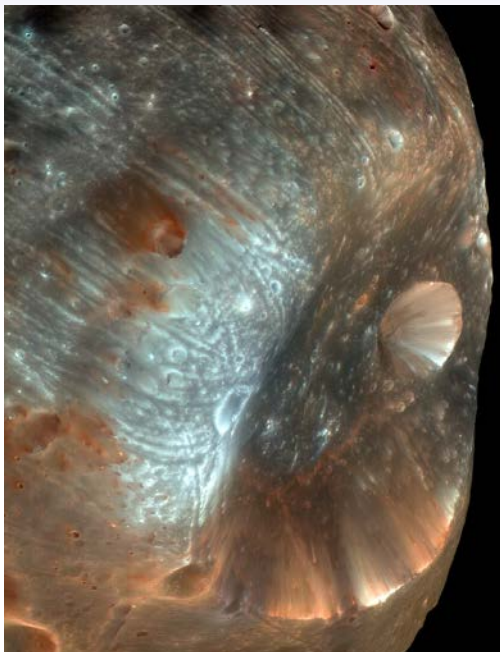
Except for hydrogen, almost all of the atoms in this room were created inside stars like our Sun that later exploded as supernovas. We are all made out of stardust.



# Saturn backlit by the Sun



## Stickney Crater on Phobos (the larger moon of Mars)



## Phobos (the larger moon of Mars)



# The Earth and the Moon as seen from Mars





## Apollo 11 photo of the Earth from the Moon



# The Earth



# The Moon from the International Space Station



## A New Martian Impact Crater (2010 to 2012)

