

If the wind has a high enough velocity, could a plane flying with the wind lose its ability fly? What if the plane was flying into the wind?

Why does the Earth change the shape of its orbit (from almost circular to more elliptical)?

What is the Brazil Nut effect and how does it work?

How was G , the universal gravitational constant, found and proven to be true in all cases?

Why are soap bubbles spherical and how do they retain their spherical shape? What forces cause them to remain spherical, and why do they snap out of its shape when they come in contact with our fingers, for example?"

What determines if a bat will break when it hits a baseball?

Why do auroras (i.e. aurora borealis and aurora australis) occur?

What exactly are superconductors and what's the physics behind them?

Is that possible to increase the density of a pure solid object? For example, if we have a solid pure iron cube, with initial volume V , is there any possibility that we can compress the cube from all directions and make the final volume V less than the initial V ?

Why does your face explode when you remove your helmet in space?

How do really tall trees transport water to their top leaves? Are pressure variations enough to counteract gravity for trees such as redwoods?

We discussed energy resources last class. I'm curious about zero point energy. How does it work and could it be a possible new energy source?

What are the leading theories as to how the Universe came into existence? What exactly is the Big Bang Theory and are there any other comparable theories?