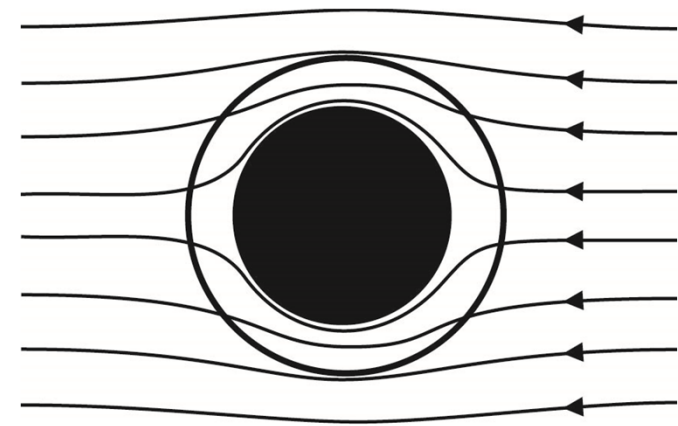
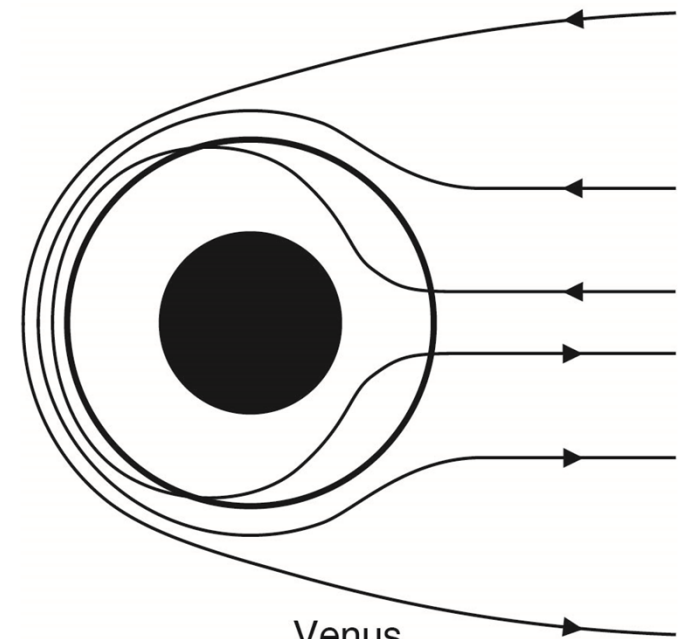


Determining the Size of Planetary Cores

- During the Apollo program the size of the Moon's iron core was determined by the distortion of the magnetic field in the Earth's magnetotail by the presence of the Moon. Repeated soundings showed that the core was close to 400 km in radius, a value recently confirmed seismically
- Today Venus Express is adding magnetic measurements to those obtained by Pioneer Venus that define the distortion of the magnetic field wrapped around the planet by the solar wind. We hope to be able to determine the magnetic distortion from orbit but a better determination could be made from the atmosphere in balloons that would circle the globe every four days.
- A similar measurement could be made from the surface of Mars by InSight or Mars2020 if so instrumented using the rotation of the planet to define the induced field.



The Moon



Venus