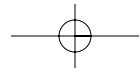
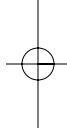
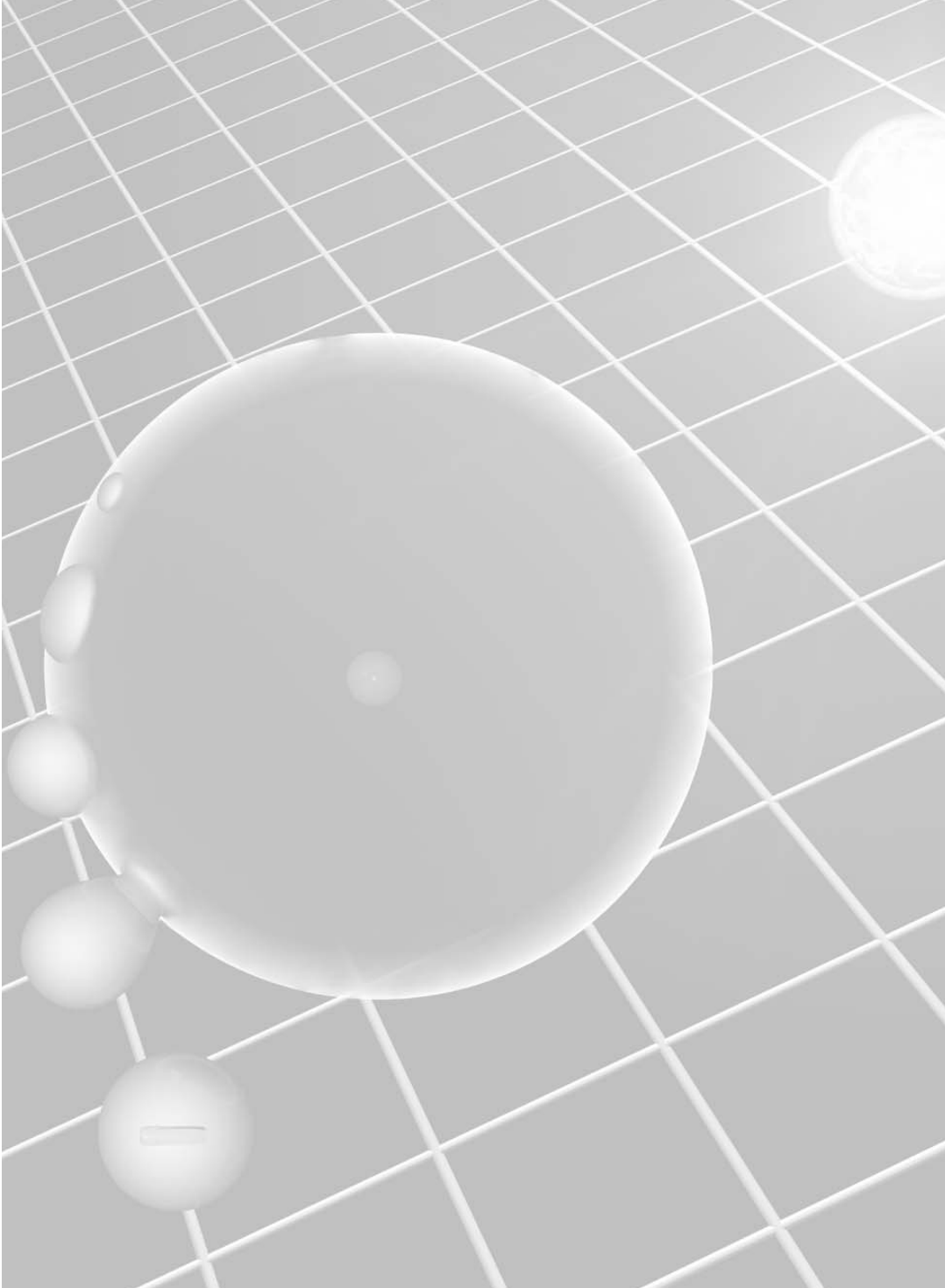


## CHAPTER SIX

# AN ATOMIC EXPLANATION

### *In this chapter*

- We will briefly examine the currently accepted atomic model
- Be introduced to the optional laws of physics
- Consider the gravitational fields surrounding atomic nuclei
- Be introduced to transient energy and the electrosphere
- Consider the electron
- Consider origo's motion through matter





## The Current Atomic Model

The currently accepted model of the atom consists of a nucleus, an electron cloud, and empty space. In this model, almost all of the atom's mass is contained within the positively charged nucleus; the remaining mass makes up the negatively charged electrons. Most of the atom's volume is the empty space between the electrons and the nucleus. The electrons exist within an electron cloud, which is not actually a cloud but the empty space surrounding the nucleus, which symbolizes the probabilities for the electrons' locations as they orbit the nucleus.

## Something Here Is Not Quite Right

If there are electrons in orbit around the nucleus and only empty space between them, the atom could not exist with other atoms. Let us consider a hydrogen atom, which is purported to have only one electron in orbit in the empty space surrounding the nucleus.

The empty space between the electron and the nucleus of a hydrogen atom must be just that, empty space, for there would be no room for air or anything else to exist there. The empty space must be a complete vacuum; if it were not a complete vacuum, there would be resistance to the electron's motion, and its orbit would decay, causing it to collide with the nucleus.

Let us now imagine two hydrogen atoms next to each other.

There are two separate positively charged nuclei with nothing but empty space between them, each having one orbiting, negatively charged electron. Now imagine that we somehow force these two atoms toward each other. If there is only empty space between them, then there is nothing to prevent both atoms from merging. One may say that the positive charge on the protons in the nuclei will repel each other, thus preventing them from merging. However, the electrons of each would surely collide with the protons of the other because they would attract each other, thus making the nuclei of both atoms electrically neutral. At this stage there would be nothing to prevent the nuclei from colliding; instead of two hydrogen atoms, there would remain only one electrically neutral mass, consisting of most of the mass of both hydrogen atoms. Not only does this model not make sense, but it also violates basic laws of physics: Maxwell's laws of electromagnetism.

### The Optional Laws of Physics

According to Maxwell's laws of electromagnetism, an accelerated charge will produce an electromagnetic wave and radiate energy away. Within the accepted atomic model, electrons are charged particles, and these electrons are in circular or semi-circular orbits around the atomic nucleus. If these electrons are in orbit and they are charged particles, then they are accelerated charges and, therefore, must radiate energy in the form of an electromagnetic wave. Of course, if this actually happened,