

ANSWER: ELECTROMAGNETISM'S HEART

The answer is: a. This duality is, in essence, the very heart of electromagnetic theory. It immediately means that once introduced into the universe, an electric field or a magnetic field becomes immortal—it goes on someplace forever. For if you discharge an electrically charged body and so try to kill the associated electric field, or if you destroy a magnet and so try to kill the associated magnetic field, the very death of either of the fields gives rise to a new field of the other kind: electric to magnetic or magnetic to electric. The dying field is a **CHANGING FIELD**, so it must give rise to a new field of the other kind.

So on and on forever it goes. The electric field collapsing to make a magnetic field, the magnetic field collapsing to make an electric field—an electric field “reincarnated.” This perpetual motion is the machinery that propagates radio waves, light waves and even x-ray waves through space.

Travel and travel. Though the broadcasting station is long silent, the candle long out, the radiation lab long closed—the wave goes on. Eternally faithful to its last command: **NEVER EVER STOP.**