

Re: Infinite reciporal interactions?

Source: <http://sci.tech-archive.net/Archive/sci.physics/2006-07/msg01671.html>

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 - *Date:* 16 Jul 2006 15:28:41 -0700
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Euler Cheung wrote:

Does reciporal interaction happen in Physics?(Effect interact with cause) i.e. Would an electrical current influence by its Magnetic flux lines? Could all normal law of electromagnetic explored as the result of infinite reciporal interactions?

In electromagnetism we have Maxwell's Laws. They are Gauss' Law for Electricity, Gauss' Law for Magnetism, Ampère's Law, and Faraday's Law.

As a set they describe in detail the behavior of electric and magnetic fields, including the induction of electric current by a magnetic field changing around a conductor and the production of a magnetic field by the movement of electric charges.

While these laws may look complicated when taken separately, when expressed in the proper mathematics (tensor calculus) they simplify to a single second order differential equation, the same as a simple harmonic oscillator (a mass on a spring, a swing, planetary motions).

Interactions are just that: what goes on *between* something and something *else*. In this sense, everything has reciprocal interactions: everything that is affected by something else also affects that other thing. For example, magnetic fields affect the movement of charges, and moving charges affect magnetic fields.

"I call myself a 'narapoid' – paranoids bother me, so I bother them back." – B.M. Evry

HTH

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