

# A Central Force Oscillating in Time Caused by a Linear Change in Time of the Magnetic Induction

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A charged particle in its planar motion in a constant magnetic field is submitted a centripetal force acting on that particle. The amplitude of this force is constant in time. In this paper it is demonstrated that by a linear change in time of the magnetic induction another centripetal force acting on the particle is created. This force has an amplitude oscillating in time with the frequency equal to that of the particle gyration.

*Key words:* Magnetic Induction; Time Dependent Central Force.