

**STUDY OF THE INFLUENCE OF RADIATION ENERGY AND  
PRESSURE IN CASE OF STRONG POINT EXPLOSION IN A  
SELF-GRAVITATING, MAGNETO-RADIATIVE MEDIUM  
WITH ZERO TEMPERATURE GRADIENT**

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**Abstract**

The self similar problem of a strong point explosion in a self-gravitating, magneto-radiative medium with zero temperature gradient is studied where the effects of Mach number and Alf'ven Mach number upon the flow variables behind the shock in presence and absence of radiation energy and pressure is considered. The magnetic field is assumed to have the azimuthal direction only. Also the radiation is assumed to be in local thermodynamic equilibrium with the fluid. The result is displayed graphically as well as by tables.

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Key Words : *Strong point explosion, Radiation energy and pressure, Self-gravitating, Shock waves, Zero temperature gradient, Mach number, Alf'ven Mach number.*

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