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**Limitation of Constraining $\dot{G}/G$ from Orbital Timing of Planets and Pulsars**[1] RAJENDRA GUPTA, University of Ottawa — Constraints on the variation of the gravitational constant $G$ have been obtained by many observers using different methods, the most reliable and stringent being those based on the orbital timing of planets in the solar system and binary pulsars. We show that the constraints thus determined are on $\dot{G}/G - 3\dot{c}/c$ rather than on $\dot{G}/G$ when the speed of light $c$ is also considered to be varying. This is in confirmation with the relativistcally covariant cosmological model that determined that $c$ varies as $\dot{c}/c = \dot{G}/3G$ by fitting the supernovae 1a data [MNRAS 498, 4481 (2020); arXiv:2009.08878].

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