Bulk Viscous Bianchi Type V Cosmological Model with Time Dependent Gravitational Constant and Cosmological Constant in General Relativity

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Abstract : In this paper, we investigate Bulk Viscous Bianchi Type V Cosmological Model with Time dependent gravitational constant and cosmological constant in general Relativity by assuming $\xi(t)=\xi_0$ p^m where ξ_0 and m are constants. We also assume a variation law for Hubble parameter as $H(R) = a (R^{(-n)+1})$, where a>0, n>1 being constant. Two universe models were obtained, and their physical behavior has been discussed. When n=1 the Universe starts from singular state whereas when n=0 the cosmology follows a no singular state. The presence of bulk viscosity increase matter density's value. **Keywords :** Bulk Viscous Bianchi Type V Cosmological Model, hubble constants, gravitational constant, cosmological constants **Conference Title :** ICSRD 2020 : International Conference on Scientific Research and Development **Conference Location :** Chicago, United States

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