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Thermo-dynamical effects on FRW cosmological model for various Dark Energy

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In this discussion, we have analysed the thermo-dynamical effects of a cosmological model using Einstein Theory. To study the model, we have considered several time varying dark energy states in two different assumptions, from which we found a phantom phase during spatially open universe for $\Lambda \propto$ ☒ ☒–☒ and all remaining results indicates a quintessence phase. The temperature and entropy density of the model remain positive for both the cases. In view of Energy Conditions, the assumptions yields identical result. The Strong Energy Condition violates, that indicates an accelerating expansion of the Universe.

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