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Constraining dark energy models using Hubble parameter, Supernova, and BAO Data<sup>1</sup> MUHAMMAD FAROOQ, Kansas State University — We use Hubble parameter versus redshift data, Baryon Acoustic Oscillation (BAO) data and Supernova Type Ia (SNeIa) data to place constraints on model parameters of one constant two one time-evolving dark energy cosmological models. These constraints are we got are pretty much consistent with (through not as restrictive as) those derived by Yun & Ratra (2011). The reason for that is the systematic errors in new BAO and SNeIa data are more as compared to the old data Yun & Ratra (2011). A joint analysis of the Hubble parameter data with more restrictive baryon acoustic oscillation peak length scale and supernova Type Ia apparent magnitude data favors a spatially-flat cosmological model currently dominated by a time-independent cosmological constant but does not exclude slow time-varying dark energy.

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