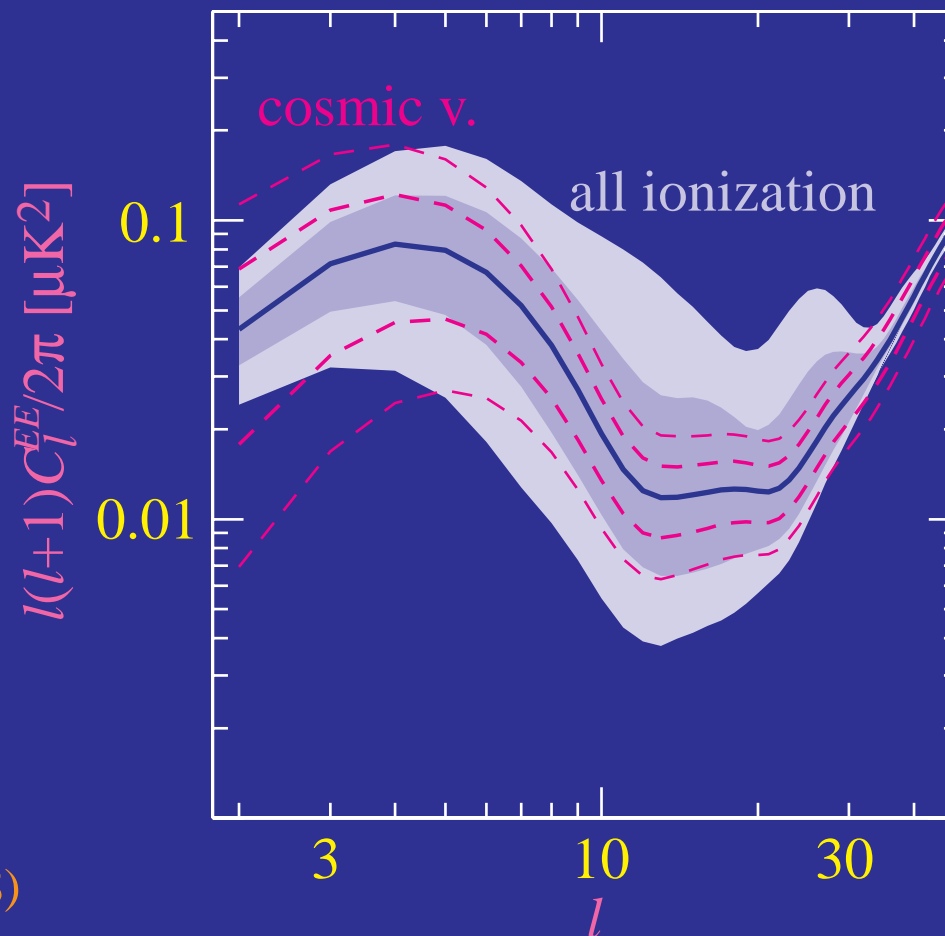


# Model-Independent Reionization

- All possible ionization histories at  $z < 30$
- Detections at  $20 < l < 30$  required to further constrain general ionization which widens the  $\tau$ - $n_s$  degeneracy allowing  $n_s = 1$
- Quadrupole & octopole predicted to better than cosmic variance test  $\Lambda$ CDM for anomalies



# Horizon-Scale Power

- **Polarization** is a robust indicator of **horizon scale power** and disfavors suppression as explanation of **low quadrupole** independently of **ionization** or **acceleration** model

