

Your name: \_\_\_\_\_

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# AST 10: Homework 12b

1. What is “structure formation” and how does cosmic inflation attempt to explain it?
2. When was the first progress made in understanding quantum fluctuations in inflation?
3. What scientific missions are looking for the ripples in the microwave background that inflation predicts? Have we seen the ripples?
4. What are two reasons that inflation re-opens the question of the initial singularity (the beginning of the Universe)?
5. What does it mean to say that inflation is future-eternal?
6. What is a multiverse? Why do we think inflation might predict it?
7. Do we now think that we have proof that inflation, too, must have had a beginning? What expansion condition is this based on?