

# **Justification:**

## **1. Background/Motivation**

- what is the big picture
- what has been done
- what is the big question that needs answer

## **2. What we propose to do**

- observing strategy
- from data to scientific results

## **3. What are the immediate results?**

- what physical parameters can be derived
- what theories can be tested?
- how do the results address the big question

## **4. Scientific impact on broader scales**

- what is the impact on, say, cosmic origin?
- why should people outside our field care?

# **DOs and Don'ts**

- 1. Read and follow instruction**
  - **page limit**
  - **use template, if any**
  - **use readable fonts (12 pt)**
  
- 2. Write clearly and concisely**
  - **define acronyms (SST)**
  - **write defensively**
  - **self-contained proposal**  
(don't ask reviewers to read other papers)
  - **don't confuse reviewers**  
(don't provide irrelevant information)
  - **cite appropriate references**  
(reviewers are offended for not being cited)
  
- 3. Ask colleagues to read/critique**
  - **can people "understand" you?**
  - **English, grammar, typos?**
  
- 4. Review comments**
  - **address concerns in revision**
  - **take it seriously**

<https://aas.org/hints-preparing-research-proposals#sah>

## **Scientific writing**