

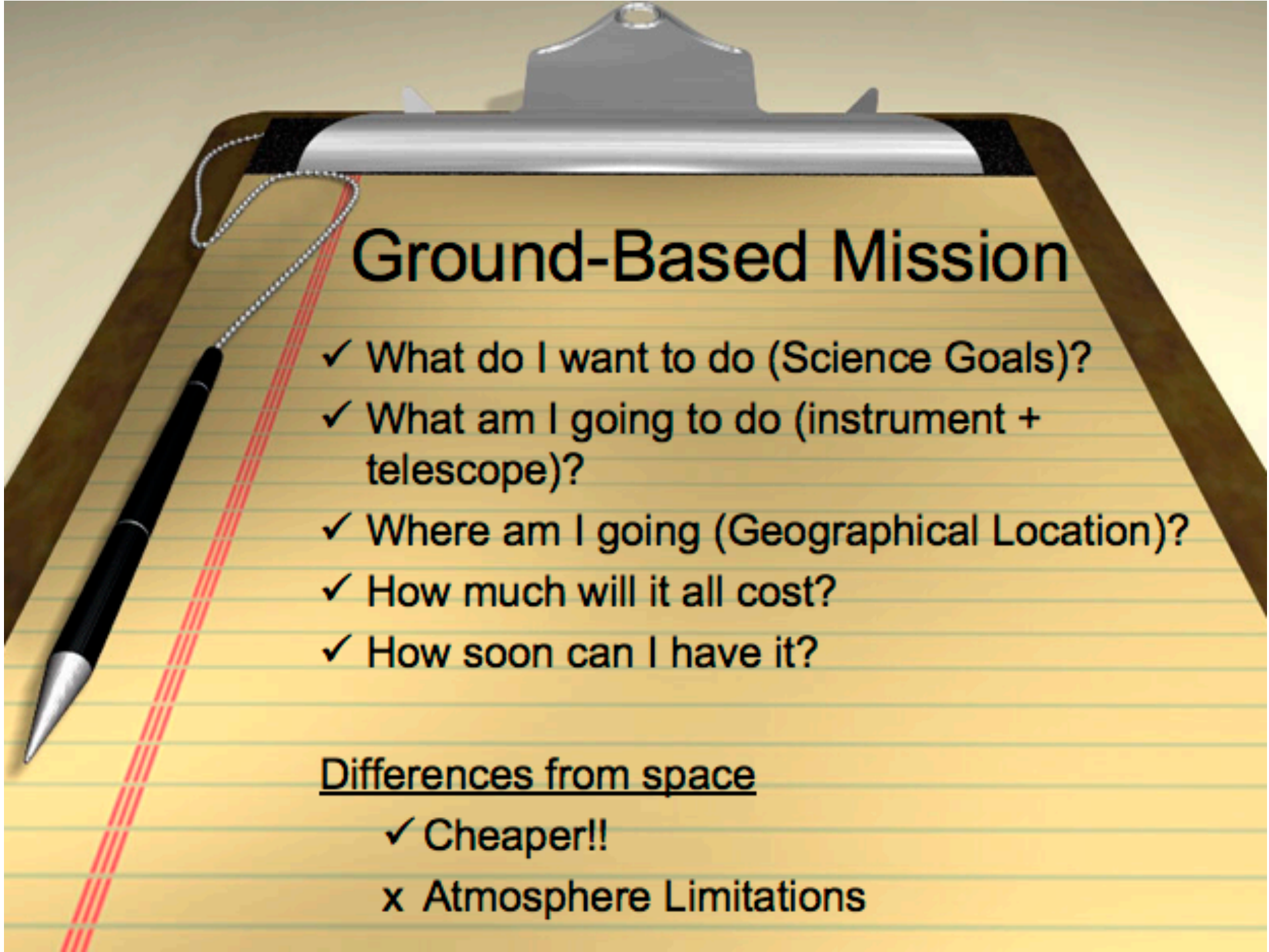
Ground-Based Mission



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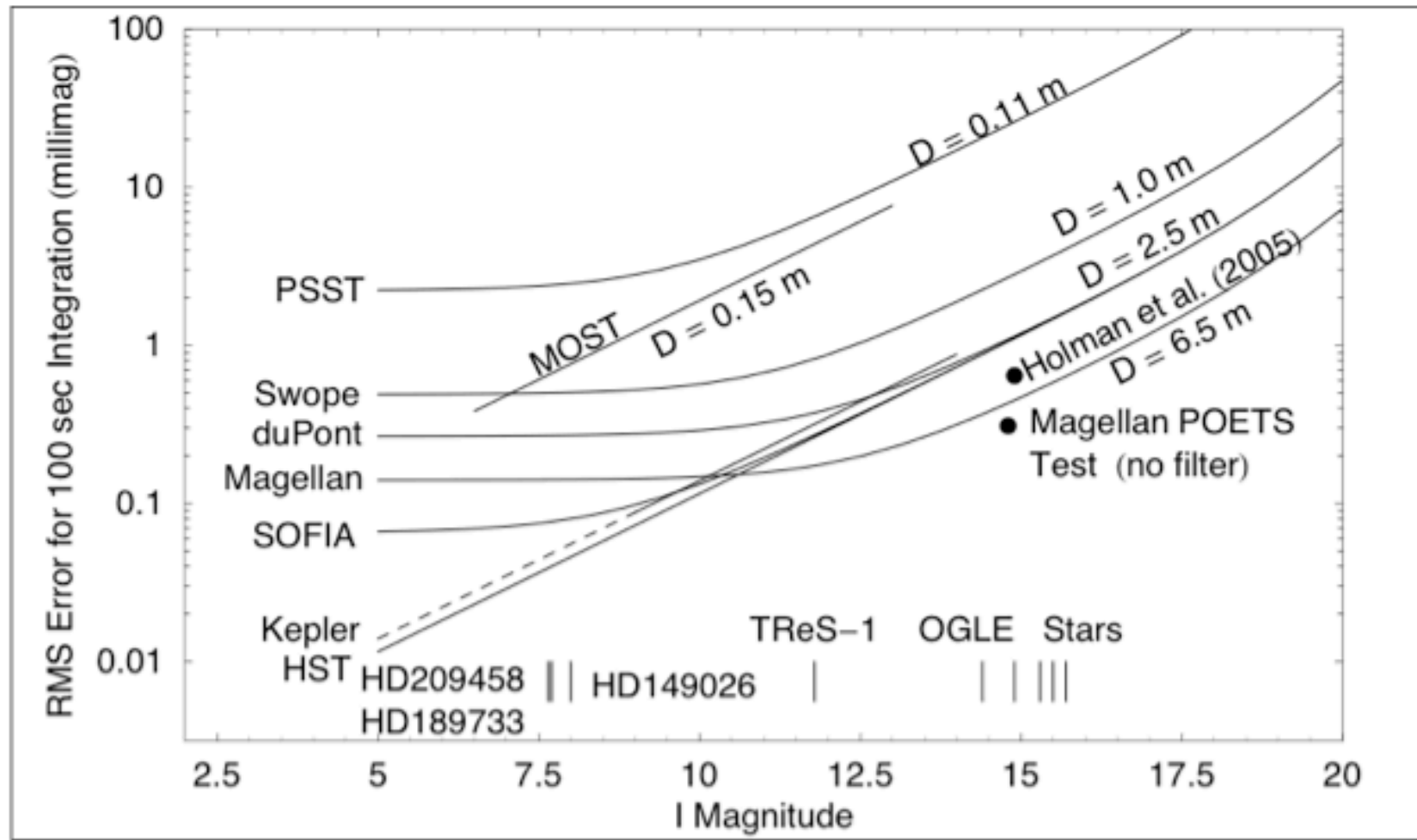
Ground-Based Mission

- ✓ What do I want to do (Science Goals)?
- ✓ What am I going to do (instrument + telescope)?
- ✓ Where am I going (Geographical Location)?
- ✓ How much will it all cost?
- ✓ How soon can I have it?

Differences from space

- ✓ Cheaper!!
- x Atmosphere Limitations

Ground-Space Comparison



Many Choices

- 1. Transits**
- 2. Direct imaging**
- 3. Radial velocity**

- 4. Many small telescopes or**
- 5. A few large telescopes or**
- 6. A giant telescope**

Outline

- 1. Science goals, mission name (bonus for acronym and logo!!)**
- 2. Define telescope and instrument**
- 3. Choose geographic location**
- 4. Describe major risks**
- 5. Estimate total mission cost**

1. Science goals

- ✦ Major science goals and relevance to field
- ✦ Mission name (and acronym/logo)

- ✦ **Wavelength**
- ✦ **Size**
- ✦ **Sensitivity**
- ✦ **Spectra Resolution**
- ✦ **Angular Resolution**

3. Describe major risks

- ✦ Unusual size
- ✦ New technologies

10. Estimate total mission cost

- ✦ **Telescope**
- ✦ **Instrument**
- ✦ **Operations**