


ASTR 4800 - Space Science: Practice & Policy
Professor Jack Burns

- Today's Topic: **What is Space Policy?**




Class Exercise: In your view, what were the goals of this video?

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Homework for Next Class

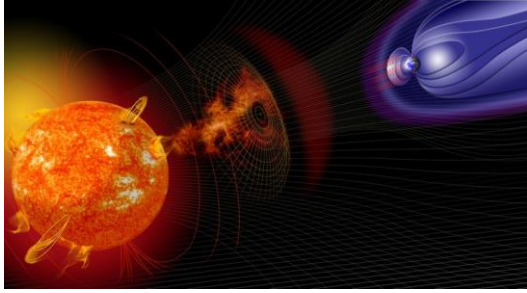
- **Next class:** *Science Policy in the 21st Century*.
 - Read Chapters 3, 6-10, in *Beyond Sputnik*.
- Sign-up for class PowerPoint presentations or participating in debates.
- Sign-up for “Space in the News”.
- Class notes are on class website (<http://lunar.colorado.edu/~jaburns/astr4800>).



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Space in the News: Increased solar activity creates new challenges for smallsats
<https://spaceneews.com/increased-solar-activity-creates-new-challenges-for-smallsats/>

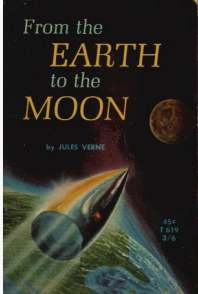
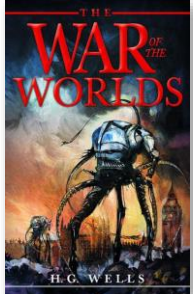


An increase in solar activity will result in more atmospheric drag on satellites and risk damaging or disrupting those spacecraft. Credit: NASA

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Space Science and Science Fiction

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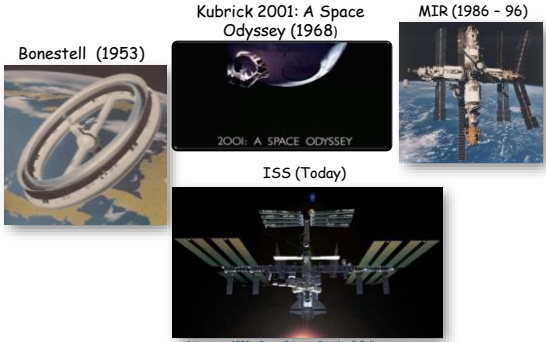
Space Stations

Bonestell (1953)

Kubrick 2001: A Space Odyssey (1968)

MIR (1986 - 96)

ISS (Today)



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Destination Moon (1950)




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Space Telescopes

Bonestell



Hubble Space Telescope



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War of the Worlds (1953)



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Cat Women of the Moon (1953)

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What is Science Policy?

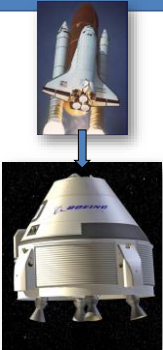


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Definition of Public Policy

- It's the processes & players involved in making governmental decisions.
- **Public Policy** is outcome produced when public officials arrive at some decision regarding the best course of action for addressing issue of public concern
 - Example: Should the Space Shuttle be replaced with a new spacecraft from a private contractor (e.g., the Starliner crew transport by Boeing)?
- **Policy** is process & product.




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Who should set Science Policy?

- Who knows best? *Scientists* or *Politicians*?
- Prior to WWII, there was no well-defined U.S. science policy. The war (e.g., Manhattan Project) led to recognition of funding basic/fundamental science.
- This has led to a tension between science & policy-making => conflict between science & democracy.
- How do we decide the scope of national investments in research?



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