



Aeronomy Program Update

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Thanks to Aeronomy Reviewers

Dear Dr. Koothrappali,

The quality of the awards selected for support by the NSF depends greatly on the critical judgments of expert reviewers. I hope you will help us evaluate the proposal listed above...

Dear Dr. Cooper,

The Aeronomy Program at NSF is targeting – Oh, no, this is real soon – for a panel. Would you be willing and able to participate?

Thank you to all who responded to my requests

- Adhoc (mail-in) reviews in core programs
- Panel reviews in core programs
- Reviews in interdisciplinary/other Geospace programs
 - EarthCube, Big Ideas, FDSS, DASI, MRI, MSIR

Funded/Recommended in FY19 to Date

FY17 \$10.6M

FY18 \$12.6M (includes “loan” from Space Weather program)

FY19 \$9.1M (reflects loan payout)

- 2 CAREER awards
- 4 CEDAR projects
- 6 Aeronomy projects
- 2 conference proposals

New awards are standard
Mortgage rate down from
~35% in FY19 to
~25% in FY20

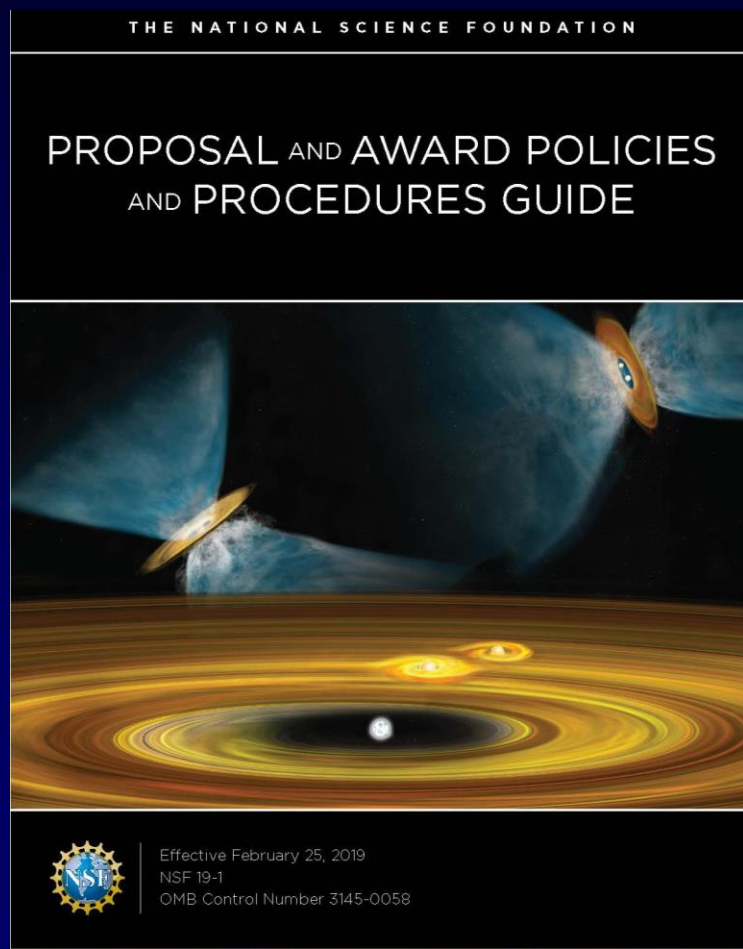


Other Factors

- Program portfolio balance
 - Sub-fields
 - Geography
 - Career stage
 - Institution type
 - Participation of URM
- Community research priorities
- Availability of other funding

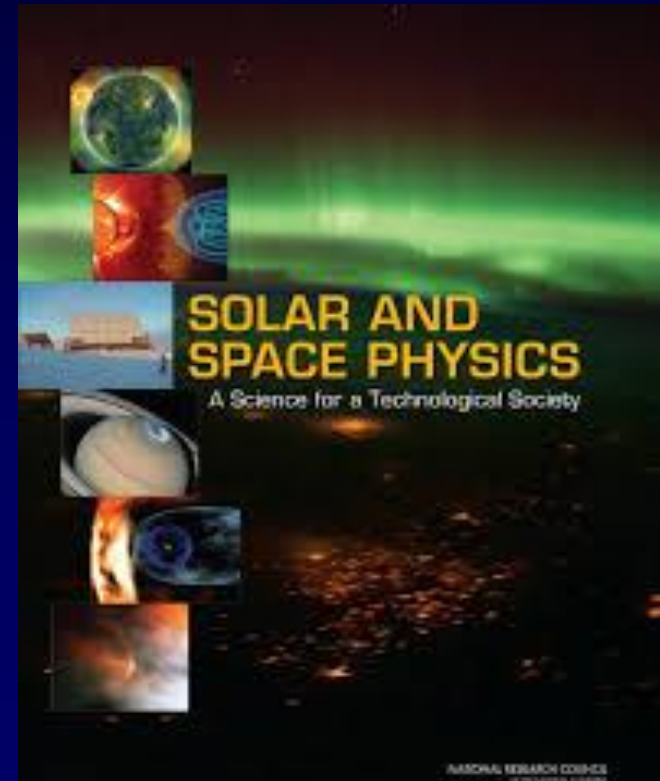
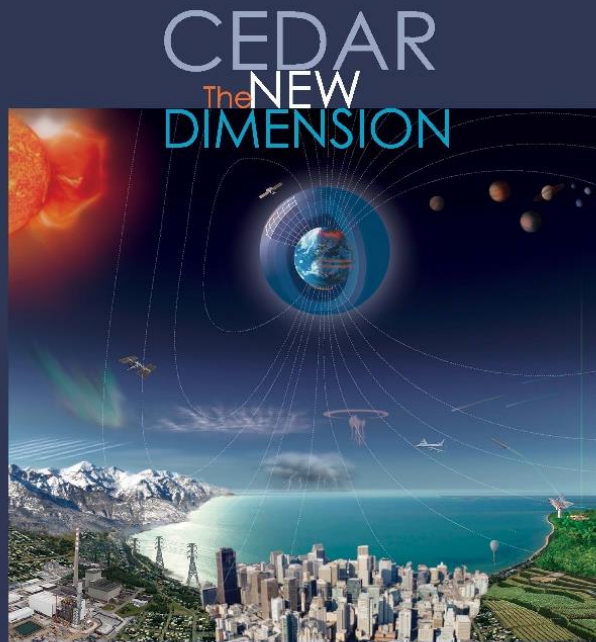
Proposal Preparation

- Refer to the *most recent* Proposal and Award Policies and Procedures Guide
 - Separate section on Intellectual Merit
 - Separate section on Broader Impact
 - Publications from the prior NSF award(s) *that you are reporting on* should be in Prior NSF Support or References Cited



Proposal Preparation 2

- Do not use gender/age-specific language
- Do not use technical jargon in titles
- Address relevance to Aeronomy
- Develop your own ideas
- Address Broader Impacts well



Broader Impact: Student Training



PI has strong track record/potential as an advisor?

PI has given some thought to the student's involvement?

- Student's project identified? Realistic?

- Timeline consistent with proper advancement of student training?

Stronger benefits to student's career than other proposals with similar student support?

Broader Impact: Educational Outcomes

Proposal

Educational
Outcomes

Yes

Broader
impact
strength

Curriculum development (new classes/modules/topics)?
Advances in pedagogy/teaching methods?
Community benefits (sharing of teaching materials)?
Improvements in participation of underrepresented groups?

Broader Impact: Big Picture

Trains highly-skilled personnel

Generates educational outcomes

Closes achievement gap

Produces project-specific tools

Addresses common misconceptions

Advances prediction capabilities

Enhances leadership in space

Leverages geospace facilities

Develops remote sensing tools

Develops STEM workforce

Improves STEM education

Broadens participation

Integrates research and education

Increases public literacy

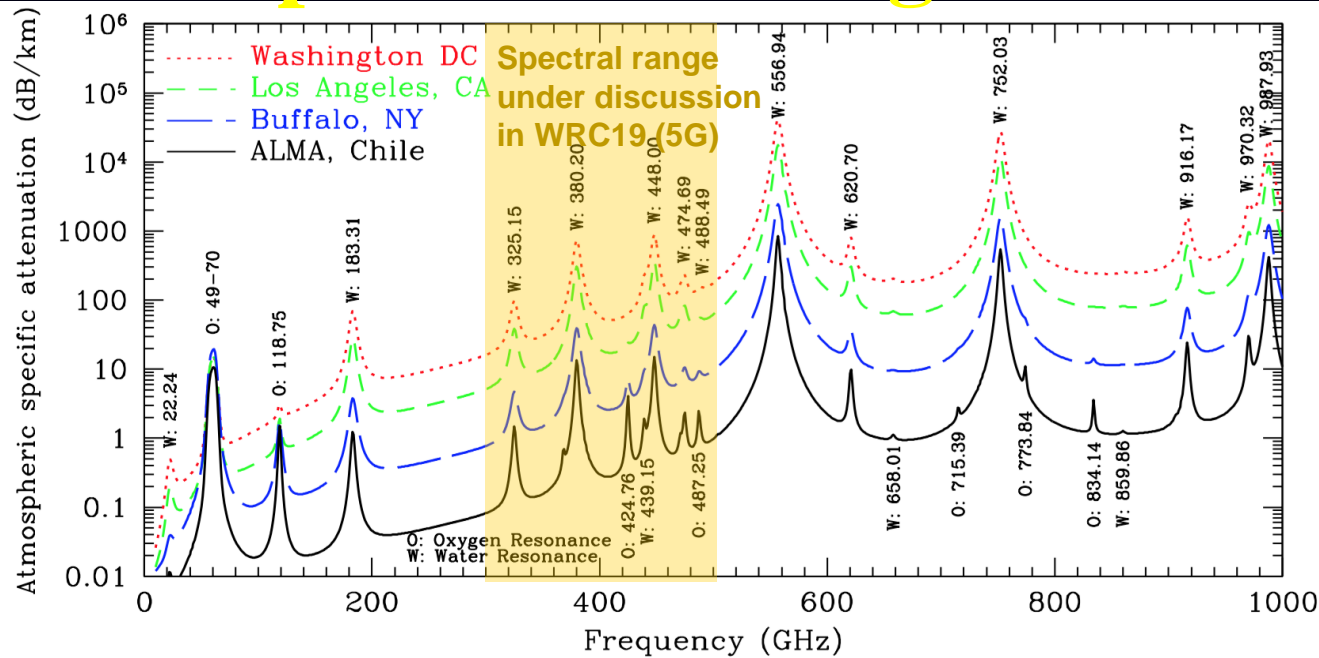
Increases national security

Increases economic competitiveness

Enhances research infrastructure

Develops synergies with other fields

Spectrum Management and Policy



Radio spectrum is shared between commercial, governmental, and scientific uses

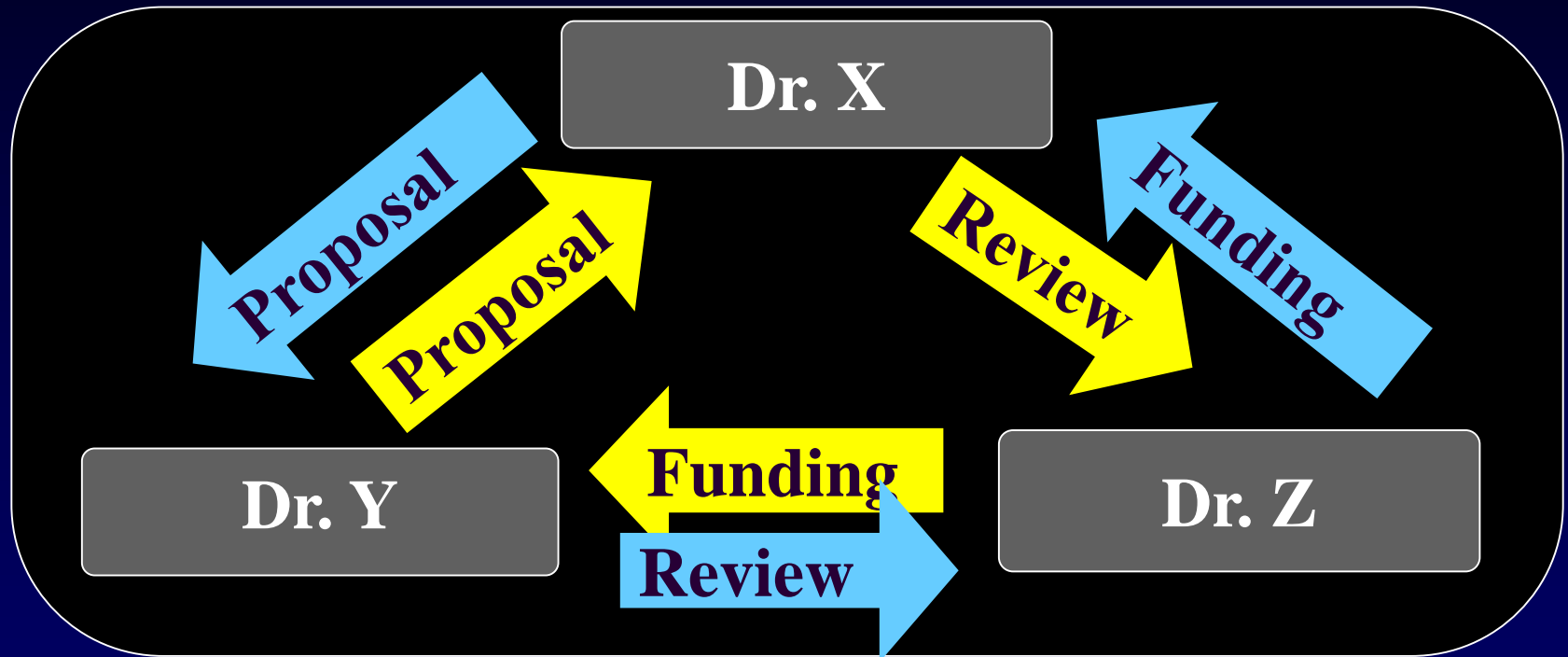
- Radio regulations are both international (ITU) and local (e.g. FCC)
- Increasing commercial demand/usage for radio frequencies due to recent advances in telecommunications technologies
 - In 2015, auction of 65 MHz raised over 40 billion \$!
 - It is difficult to reverse regulations and recover spectrum when passive services are negatively impacted

Let us know of any issues in the Geospace community

Agree to Serve as a Reviewer?!

Q: Why would you want to be a reviewer?

A: Community needs you and you need community



Q: What can I do?

A: Volunteer (email me)

Say 'yes' next time you receive an invitation