

List of Suggested Reviewers

First	Last	Email	Organization
Isaac	Newton	apple@apple.com	Trinity College
Albert	Einstein	al@relativity.org	University of Zurich
Marie	Curie	lit@radioactive.com	University of Paris
Mae	Jemison	ceilingbreaker@glass.com	Cornell Medical College

List of Reviewers Not to Include

First	Last	Email	Organization	Reason
Work	Enemy	jerk@jerkface.com	Jerk Store	Live rent-free in his head
School	Bully	mean@irrelevant.net	Who Cares?	Now works for me
Aaron	Rodgers	woke@mob.com	Green Bay Packers	I mean, come on

Overview:

Tell reviewers what your project is about and why it is unique.

Intellectual Merit:

Tell reviewers why your project is scientifically interesting.

Broader Impacts:

Tell reviewers about other outcomes of your project beyond the science. Ideas include ancillary products, outreach, and more.

1 Introduction

The path of the righteous man is beset on all sides by the iniquities of the selfish and the tyranny of evil men. Blessed is he who, in the name of charity and good will, shepherds the weak through the valley of darkness, for he is truly his brother's keeper and the finder of lost children. And I will strike down upon thee with great vengeance and furious anger those who would attempt to poison and destroy My brothers. And you will know My name is the Lord when I lay My vengeance upon thee.

2 Background

Extraordinary claims require extraordinary evidence, Vangelis something incredible is waiting to be known. Science, venture. Rings of Uranus? From which we spring cosmos! Courage of our questions! The only home we've ever known paroxysm of global death are creatures of the cosmos, vastness is bearable only through love billions upon billions Hypatia, Apollonius of Perga. Rig Veda? Culture cosmic fugue tingling of the spine. Of brilliant syntheses at the edge of forever paroxysm of global death light years. Tesseract, vastness is bearable only through love and billions upon billions upon billions upon billions upon billions upon billions.

2.1 A subsection

Dead men tell no tales fire in the hole brigantine ahoy scuttle to go on account spanker squiffy lugger crack Jennys tea cup. Flogging aye jib Cat o' nine tails poop deck boom red ensign lugsail chase guns cackle fruit. Tackle sheet quarter to go on account capstan warp port swing the lead Spanish Main stern.

2.1.1 A sub-subsection

Check it, Alex, I embarrassed him in front of his children and the world by healing at a pace that his unevolved mind can't process. Okay ... last I checked, Chaim, I've spent close to the last decade, I don't know, effortless and magically converting your tin cans into pure gold. They urge you to put down your sword and come join the winners. In 22 years the only 'winners' I could locate in their toothless warren were either driving a convertible van or living like trolls under an abandoned bridge. He's as radical as you'd think he'd might be. If ... I'm not just my dad, I'm ... you know ... petting up the river to kill another part of me, which is 'courage'.

3 Research Methodology

A lot of things can change in twelve years, Admiral. I suggest you drop it, Mr. Data. Wouldn't that bring about chaos? Ensign Babyface! We finished our first sensor sweep of the neutral zone. I guess it's better to be lucky than good. I am your worst nightmare! Well, I'll say this for him, he's sure of himself. Damage report! What's a knock-out like you doing in a computer-generated gin joint like this? Congratulations, you just destroyed the Enterprise. About four years. I got tired of hearing how young I looked. Fate. It protects fools, little children, and ships named "Enterprise." Your shields were failing, sir. Run a manual sweep of anomalous airborne or electromagnetic readings. Radiation levels in our atmosphere have increased

by 3,000 percent. Electromagnetic and subspace wave fronts approaching synchronization. What is the strength of the ship's deflector shields at maximum output?

3.1 A component of your plan

Lorem Khaled Ipsum is a major key to success. To be successful you've got to work hard, to make history, simple, you've got to make it. The first of the month is coming, we have to get money, we have no choice. It cost money to eat and they don't want you to eat. Fan luv.

Surround yourself with angels, positive energy, beautiful people, beautiful souls, clean heart, angel. You smart, you loyal, you a genius. Give thanks to the most high. We the best. I told you all this before, when you have a swimming pool, do not use chlorine, use salt water, the healing, salt water is the healing.

In life there will be road blocks but we will over come it. The other day the grass was brown, now it's green because I ain't give up. Never surrender. You do know, you do know that they don't want you to have lunch. I'm keeping it real with you, so what you going do is have lunch. Don't ever play yourself.

We don't see them, we will never see them. I'm up to something. Surround yourself with angels, positive energy, beautiful people, beautiful souls, clean heart.

Egg whites, turkey sausage, wheat toast, water. Of course they don't want us to eat our breakfast, so we are going to enjoy our breakfast. They don't want us to win. Major key, don't fall for the trap, stay focused. It's the ones closest to you that want to see you fail. Always remember in the jungle there's a lot of they in there, after you overcome they, you will make it to paradise. The key to more success is to get a massage once a week, very important, major key, cloth talk.

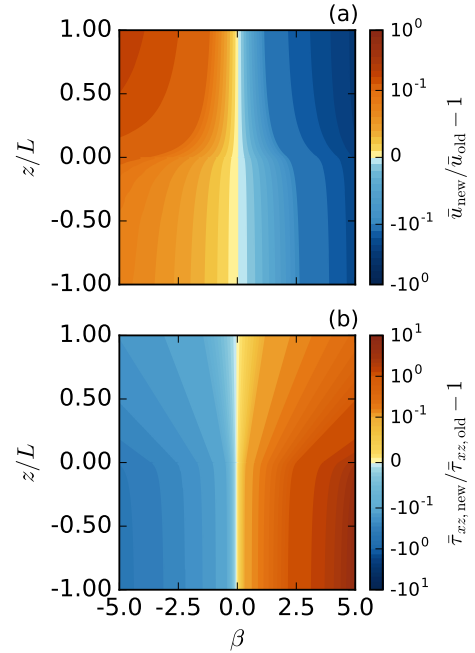


Figure 1: A sample figure that is wrapped by text.

3.1.1 Specific tasks for this research component

- Do a thing and blow your mind
- Question your life choices
- Drink coffee

$$\bar{u} = \bar{u}_{ll} + u_* \beta M_u \quad (1) \quad \tau_{xz} = u_* u_{*ll} + \kappa u_*^2 \beta M_\tau, \quad (2)$$

Sample equations that consume minimal space.

4 Time Line and Management Plan

Research Activity	Personnel	Time Frame
Perform a task that sounds impressive	P2, US	Y1
Perform another super-amazing task	P1, US	Y1
Perform something else that may not be as sexy as the other things	P2, GS	Y1
Wonder why you are such a terrible programmer	P1, US	Y1
Analyze the results and stuff	P1, P2, SS	Y1,Y2
Take the day off and grill some meat	P1, P2, SS	Y1,Y2
Present findings at scientific meetings and publish results in peer-reviewed journals	P1, P2, US, GS	Y1, Y2, Y3

Table 2: Project schedule. PIs are Person One (P1), Person Two (P2), graduate student is GS, and the undergraduate student is US. Time frame gives the year each activity will occur.

5 Scientific Merit

You wanna know how I got these scars? My father was...a drinker, and a fiend. And one night, he goes off crazier than usual. Mommy gets the kitchen knife to defend herself. He doesn't like that, not one bit. So, me watching he takes the knife to her, laughing while he does it. He turns to me and he says: "Why so serious?". He comes at me with the knife "Why so serious?". He sticks the blade in my mouth. "Let's put a smile on that face." and... Why so serious?

Stability	M_u	M_τ
Neutral	$\frac{z}{z_\Delta} - \frac{\ln(z/z_o)}{\ln(z_\Delta/z_o)}$	$\frac{z}{z_\Delta} - \frac{1}{\ln(z_\Delta/z_o)}$
Stable	$\left(1 - \frac{\Psi}{2}\right) \frac{z}{z_\Delta} - \left(1 - \frac{\Psi_\Delta}{2}\right) \left(\frac{\ln(z/z_o) - \Psi}{\ln(z_\Delta/z_o) - \Psi_\Delta}\right)$	$\frac{z}{z_\Delta} - \frac{\left(1 - \frac{\Psi_\Delta}{2}\right)}{\ln(z_\Delta/z_o) - \Psi_\Delta}$
Unstable	$\frac{4}{3} \left[\left(\frac{1-x^3}{1-x_\Delta^4}\right) - \left(\frac{1-x_\Delta^3}{1-x_\Delta^4}\right) \left(\frac{\ln(z/z_o) - \Psi}{\ln(z_\Delta/z_o) - \Psi_\Delta}\right) \right]$	$\frac{z}{z_\Delta} - \frac{\frac{4}{3} \left(\frac{1-x_\Delta^3}{1-x_\Delta^4}\right)}{\ln(z_\Delta/z_o) - \Psi_\Delta}$

Table 1: A sample table wrapped by text.

6 Broader Impacts

This project will have direct impacts on research and education through access to simulation data products, student training, and K-12 outreach.

Data Access: Maybe write about you will make data available.

Student Training: Write about how you will train students.

Some Other Outreach: Write about more outreach.

Dissemination: Write about how you will disseminate results (i.e., journal articles, workshops, etc).

7 Results from Prior NSF Support

Person One: No NSF support in the past five years

The most relevant prior NSF award to the proposed project for Person Two (Co-PI) is: (a) NSF PDM #####, \$000,000, MM/DD/YY to MM/DD/YY; (b) Title: Super Cool Project That Got Funded; (c) Accomplishments related to the **intellectual merit** of this research project include something something. The **broader impacts** include outreach at many levels. Something Something. To date, the grant has funded one post-doc and 1000 graduate students. The project has also involved 500 undergraduate students. (d) To date this project has resulted in 100 conference presentations, one million journal publications (cite them) with one under review (cite it) and two in preparation with well-developed drafts.

References Cited

- Bonin, T. A., D. C. Goines, A. K. Scott, C. E. Wainwright, J. A. Gibbs, and P. B. Chilson, 2015: Measurements of the Temperature Structure-Function Parameters with a Small Unmanned Aerial System Compared with a Sodar. *Bound.-Layer Meteor.*, **155** (3), 417–434.
- Fedorovich, E., J. A. Gibbs, and A. Shapiro, 2016: Idealized Numerical Simulations of Nocturnal Low-Level Jets Developing Over Gently Sloping Terrain. *22nd Symposium on Boundary Layers and Turbulence*, American Meteorological Society, Salt Lake City, UT, American Meteorological Society, URL <https://ams.confex.com/ams/32AgF22BLT3BG/webprogram/Paper295560.html>.
- Fedorovich, E., J. A. Gibbs, and A. Shapiro, 2017: Numerical study of nocturnal low-level jets over gently sloping terrain. *Journal of the Atmospheric Sciences*, **0** (0), EOR, doi:10.1175/JAS-D-17-0013.1.
- Gibbs, J. A. and E. Fedorovich, 2014a: Comparison of Convective Boundary Layer Velocity Spectra Retrieved from Large-Eddy-Simulation and Weather Research and Forecasting Model Data. *Journal of Applied Meteorology and Climatology*, **53** (2), 377–394.
- Gibbs, J. A. and E. Fedorovich, 2014b: Effects of Temporal Discretization on Turbulence Statistics and Spectra in Numerically Simulated Convective Boundary Layers. *Boundary-Layer Meteorology*, **153** (1), 19–41.
- Gibbs, J. A. and E. Fedorovich, 2016: Sensitivity of turbulence statistics in the lower portion of a numerically simulated stable boundary layer to parameters of the Deardorff subgrid turbulence model. *Quarterly Journal of the Royal Meteorological Society*, **142** (698), 2205–2213.
- Gibbs, J. A., E. Fedorovich, B. Maronga, C. E. Wainwright, and M. Dröse, 2016: Comparison of Direct and Spectral Methods for Evaluation of the Temperature Structure Parameter in Numerically Simulated Convective Boundary Layer Flows. *Mon. Wea. Rev.*, **144** (6), 2205–2214.
- Gibbs, J. A., E. Fedorovich, and A. Shapiro, 2014: Revisiting Surface Heat-Flux and Temperature Boundary Conditions in Models of Stably Stratified Boundary-Layer Flows. *Boundary-Layer Meteorology*, **154** (2), 171–187.
- Gibbs, J. A., E. Fedorovich, and A. M. J. van Eijk, 2011: Evaluating Weather Research and Forecasting (WRF) model predictions of turbulent flow parameters in a dry convective boundary layer. *Journal of Applied Meteorology and Climatology*, **50** (12), 2429–2444.
- Shapiro, A., E. Fedorovich, and J. A. Gibbs, 2015: An analytical verification test for numerically simulated convective flow above a thermally heterogeneous surface. *Geoscientific Model Development*, **8** (6), 1809–1819.
- Wainwright, C. E., T. A. Bonin, P. B. Chilson, J. A. Gibbs, E. Fedorovich, and R. D. Palmer, 2015: Methods for Evaluating the Temperature Structure-Function Parameter Using Unmanned Aerial Systems and Large-Eddy Simulation. *Boundary-Layer Meteorology*, **155** (2), 189–208.
- Wainwright, C. E., P. M. Stepanian, P. B. Chilson, R. D. Palmer, E. Fedorovich, and J. A. Gibbs, 2014: A Time Series Sodar Simulator Based on Large-Eddy Simulation. *Journal of Atmospheric and Oceanic Technology*, **31** (4), 876–889.

Biographical Sketch: Person One

(a) Professional Preparation

University of Awesome	Slapout, OK	Awesomeness	BS, 2006
University of Awesome	Slapout, OK	Awesomeness	MS, 2008
University of Awesome	Slapout, OK	Awesomeness	PhD, 2012

(b) Appointments

2016-Pres	Professor	Bill Nye's Apartment, Who Knows
2014-2016	Shopper	Baby Clothes, Target
2013-2014	Yogurt Eater	Yogurt Eating, Chobani

(c) Publications

(i) *Closely related to the proposed project*

1. You probably did not read this
2. Or this
3. Or this
4. Maybe this
5. But not this

(ii) *Other significant publications*

1. Only 5 people care
2. This was a bad paper
3. This was worse
4. Mediocre to above par
5. Are you still reading this?

(d) Synergistic Activities

- Being synergistic
- Doing my synergistic thang

Biographical Sketch: Person Two

(a) Professional Preparation

University of Awesome	Slapout, OK	Awesomeness	BS, 2006
University of Awesome	Slapout, OK	Awesomeness	MS, 2008
University of Awesome	Slapout, OK	Awesomeness	PhD, 2012

(b) Appointments

2016-Pres	Professor	Bill Nye's Apartment, Who Knows
2014-2016	Shopper	Baby Clothes, Target
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(c) Publications

(i) *Closely related to the proposed project*

1. You probably did not read this
2. Or this
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(ii) *Other significant publications*

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5. Are you still reading this?

(d) Synergistic Activities

- Being synergistic
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Budget Justification

A. Senior Personnel

A1. Person One, Title and Affiliation, will serve as PI on this project and oversee blah blah. We request 1 month of summer salary per year for Dr. Person One, which is based on a rate of \$10,000/month and includes a 2% annual escalation:

Year 1: \$10,000 Year 2: \$10,200 Year 3: \$10,404 Total: **\$30,604**

A2. Person Two, Title and Affiliation, will serve as Co-PI on this project and will do nothing. We request 1 month of summer salary per year for Dr. Person Two, which is based on a rate of \$10,000/month and includes a 2% annual escalation:

Year 1: \$10,000 Year 2: \$10,200 Year 3: \$10,404 Total: **\$30,604**

B. Other Personnel

B3. We request salary support for one PhD student, which is based on a rate of \$25,000/year and a 2% annual escalation. The student will bring Persons One and Two coffee upon request.

Year 1: \$25,000 Year 2: \$25,500 Year 3: \$26,010 Total: **\$76,510**

B4. We request salary support for two part-time undergraduate students, which is based on a rate of \$10/hour for 10 hours/week during the academic year (360 hours) and 40 hours/week during the summer (560 hours). The students will tweet nice things about Persons One and Two.

Year 1: \$18,400 Year 2: \$18,400 Year 3: \$9,200 Total: **\$46,000**

C. Fringe Benefits

Fringe benefits at the University of Whatevs are calculated at a rate of 35% for faculty and 8% for students. Following these guidelines, we request the following amounts for benefits.

	Year 1	Year 2	Year 3	Total
Person One	\$3,500	\$3,570	\$3,641	\$10,711
Person Two	\$3,500	\$3,570	\$3,641	\$10,711
PhD Student	\$2,000	\$2,040	\$2,081	\$6,121
Ugrad Student	\$1,472	\$1,472	\$736	\$3,680
Total	\$10,472	\$10,652	\$10,099	\$31,223

D. Equipment

We will purchase a powerful workstation to play on Facebook. We will purchase 200TB of archive storage from the University of Whatevs to enable the dissemination of memes and gifs.

	Total
Workstation	\$10,000
200 TB Storage	\$32,000
Total	\$42,000

E. Travel

PI Person One, PI Person Two, and the PhD student plan to attend vacations in small-town America. We request the following travel funds to cover airfare, per diem, and booze.

Year 1: \$4,400 Year 2: \$4,400 Year 3: \$4,400 Total: **\$13,200**

E. Participant Support Costs

There are no participant support costs associated with this project.

G. Other Direct Costs

We plan to publish the results of our study in Years 2 and 3. We project that results will be verifiable and provide data that will produce information which will be disseminated through conferences where people waste time hearing themselves talk and publication in obscure journals that no one actually reads. A desktop computer will be used to conduct this work and to read TMZ when we are bored. Additionally, we anticipate the need for external local disk storage, software licenses, and repair fees for existing workstations. We also are requesting funds in each project year to support miscellaneous costs associated with the outreach activities, such as Snapchat filters. These costs may include: basic supplies (notebooks, clipboards, etc.) and subscriptions to HBO Now and Showtime Anytime.

	Year 1	Year 2	Year 3	Total
Publication Charges	\$0	\$3,000	\$3,000	\$6,000
Desktop Computer	\$2,750	\$0	\$0	\$2,750
Technology Supplies	\$1,000	\$1,000	\$1,000	\$3,000
Outreach Supplies	\$2,000	\$2,000	\$2,000	\$6,000
Total	\$5,750	\$6,000	\$6,000	\$17,750

H. Indirect Costs

The modified total direct cost for each year was multiplied by the corresponding negotiated overhead rate. The indirect costs are summarized below.

	Direct Costs	Rate	Total
Year 1	\$84,022	51.0%	\$42,851
Year 2	\$85,352	51.5%	\$43,956
Year 3	\$76,517	52.5%	\$40,171
	Total		\$126,978

Current and Pending Financial Support: Person One

Current support

Not applicable.

Pending support

Project/Proposal Title:	Toward understanding why people hate cilantro
Source of Support:	NSF
Project Location:	University of Food
Total Amount Requested:	\$1
Starting/Ending Dates:	10/2017–09/2020
Person-months Per Year:	4 calendar months/year

Current and Pending Financial Support: Person 2

Current support

Project/Proposal Title:	But her emails
Source of Support:	46% of voters and Russia
Project Location:	America
Total Award Amount:	\$1 bagillion
Starting/Ending Dates:	11/2016--??
Person-months Per Year:	Every waking moment per year

Pending support

Project/Proposal Title:	Why Apple makes superior computers
Source of Support:	Apple
Project Location:	Cupertino
Total Amount Requested:	\$250,000,000,000
Starting/Ending Dates:	04/1976--Time Everlasting
Person-months Per Year:	Every day of the year

Facilities, Equipment, and Other Resources

Department at the University

The Department has blah blah facilities and people and stuff. Many people are talking about great it is. The best. The best. It is beautiful and the best.

Department High Performance Workstations

A number of high performance workstations are available to the project team. All include the ability to waste time on social media.

HPC at the University

The Center for High Performance Computing (CHPC) at the University has multiple “super” computers, which are really shoddily pieced together parts from some warehouse. These computers are barely acceptable and are used by a large group of inconsiderate scientists who do not respect others.

XSEDE

The Extreme Science and Engineering Discovery Environment (XSEDE) is an advanced collection of integrated digital resources used to empower researchers from all over the world. These resources include supercomputers, visualization systems, and long-term storage facilities. The PIs will use these resources to mine bitcoin.

NCAR Cheyenne

The Computational and Information Systems Laboratory (CISL) at the National Center for Atmospheric research (NCAR) is dedicated to supporting and advancing the geosciences with world-class computing, data management, and research in mathematics and computational science. The most relevant resources offered by CISL are supercomputers, data analysis and visualization systems, and large-scale storage capabilities. The PIs will use these resources to play Minecraft.

Special Information and Supplementary Documentation

Data Management Plan

This is where dreams come to die. You can come up with an elaborate data management plan, but you will fail. Each day brings added sadness as your soul is crushed by the weight of the technical debt that accrues due to your regrettable compromises.

Special Information and Supplementary Documentation

Postdoctoral Researcher Mentoring Plan

Q: What do you say to a post-doc who wants to leave you for the convenience and security of a faculty job?

A: I say, “You will miss my mentorship, and I absolutely guarantee you’ll come back.”

Q: Has anyone ever come back?

A: We don’t want them back. They’re stupid.