

APOGEE AND SDSS: A CASE STUDY IN NAVIGATING LARGE SCIENTIFIC COLLABORATIONS



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ASTR 8500

4/24/2018



TALK OUTLINE

- Collaboration Rules and Etiquette
- Pros and Cons
- Your Collaborators and You

COLLABORATION RULES AND ETIQUETTE

ETIQUETTE

- Let Collaborators know what projects you are working on
 - Let “Close” collaborators know before announcing project to rest of collaboration
- Give collaborators the opportunity to contribute to your work
- Don’t “Step on Someone’s Toes”

RULES TO ENFORCE ETIQUETTE

- All Projects and Papers using Proprietary Data must be announced
- Papers have to be submitted to the collaboration for review before submitting to a Journal
- Anyone can join any project
- Once a Paper is announced, the project is “claimed”, the 1st author is the undisputed lead

PROS AND CONS

PROS

- Proprietary Data

CONS

PROS

- Proprietary Data

CONS

- Tele-cons

PROS

- Proprietary Data
- Great Collaborators

CONS

- Tele-cons

PROS

- Proprietary Data
- Great Collaborators

CONS

- Tele-cons
- Not-so-Great Collaborators

PROS

- Proprietary Data
- Great Collaborators
- Opportunity to be Involved in a lot of Projects

CONS

- Tele-cons
- Not-so-Great Collaborators

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- Proprietary Data
- Great Collaborators
- Opportunity to be Involved in a lot of Projects

CONS

- Tele-cons
- Not-so-Great Collaborators
- Scheduling

PROS

- Proprietary Data
- Great Collaborators
- Opportunity to be Involved in a lot of Projects
- Networking

CONS

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- Tele-cons
- Not-so-Great Collaborators
- Scheduling
- Everything Moves a Little Slower

PROS

- Proprietary Data
- Great Collaborators
- Opportunity to be Involved in a lot of Projects
- Networking
- A Lot of Data

CONS

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CONS

- Tele-cons
- Not-so-Great Collaborators
- Scheduling
- Everything Moves a Little Slower
- A LOT of Data

**YOUR COLLABORATORS
AND YOU**

THE AUTHOR LIST ON AN SDSS PAPER

George Washington, John Adams, Thomas Jefferson, James Madison, James Monroe, John Quincy Adams, Andrew Jackson, Martin Van Buren, William Henry Harrison, John Tyler, James K. Polk, Zachary Taylor, Millard Fillmore, Franklen Pierce, James Buchanan, Abraham Lincoln, Andrew Johnson, Gen. Ulysses S. Grant, Rutherford B. Hayes, James A. Garfield

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The Doers

Your Telebuddies

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The Doers
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Interested Parties

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The Doers
Your Telebuddies

Interested Parties
The Faceless Men (and Women)

TYPICAL COMMENTS TO A PAPER ANNOUNCEMENT

Hey Chris,

Great work! I'm glad to see that people are working on this :) I have a just a few minor comments listed below. Great job!

...

- You should cite my paper.
- You should put me on the paper. Towards the top. Like ...3rd author. Maybe even 2nd. Your call. My affiliation is just UVA.
- Did I mention you should cite my paper?
- I also have a different paper in prep that I haven't told anyone about, or really started working on yet, but you should cite that one too. Something like "Wilson et al. 2020, in prep"

Otherwise looks good. Feel free to implement as few or as many of the above suggestions as you'd like.

Cheers,
Robby

THE DOERS

Probably did most
of the work



YOUR TELEBUDDIES



YOUR TELEBUDDIES

“Hi Robby,
That [dropbox] link you included
is not the one you need to send
to provide public access to the
file. You need to pull up the file
in drop box and look for the
'share' option. That should
provide you a unique link to the
file, with a bunch of junk in it.”



YOUR TELEBUDDIES

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file, with a bunch of junk in it.”

“Great Paper! Thanks.”



YOUR TELEBUDDIES

“I am so sorry for the delay in
sending you my comments

...

Anyway, It is a very good paper

...

My only comment is ...

about high-Mg population. This population looks like the extension of the thick disk in the halo. In fact they show also a rotational component. It is not clear to me why these stars are considered part of the halo and not of the thick disk. Now, you consider that all stars with metallicities lower than -0.9 dex are part of the halo. But Venn et al. 2004 show that there are some thick disk stars with metallicities lower than this value. Anyway, according to their data the thick disk stars with metallicities lower than -0.9 dex are a minority. Therefore, this may not have a significant impact in the results of the paper. However, this is one of the things that a referee could ask to clarify. Do you consider/try to use any kinematics information to separate between halo and thick disk stars? The strength of the paper would be increased if it is possible to differentiate between thick disk and halo in such a way. However, if this is not possible you can also use Venn et al to justify the selection of $[Fe/H] = -0.9$ dex to differentiate between thick disk and halo since the number of thick disk stars with lower metallicities is very small.

”



OTHER INTERESTED PARTIES

“I am certainly interested, so please sign me up. I believe several of my colleagues (who have access through the UNIVERSITY buyin) would have interest as well, namely PERSON A, PERSON B, and PERSON C. Could you sign them up as well?”



OTHER INTERESTED PARTIES

“... May I highlight our recent discoveries with APOGEE ...

See:

- 1.) [Person A] et al. (2016,ApJ)
- 2.) [Person A] et al. (2017,ApJL)
- 3.) [Person A] et al. (2017)

...

I would be grateful if you could point to our work in your paper at least our Letter (2017) ... as it ... would help give our idea some proper credit, before it falls into complete oblivion.”

-Person A



**THE
FACELESS
MEN
(OR WOMEN)**



THE FACELESS MEN (OR WOMEN)

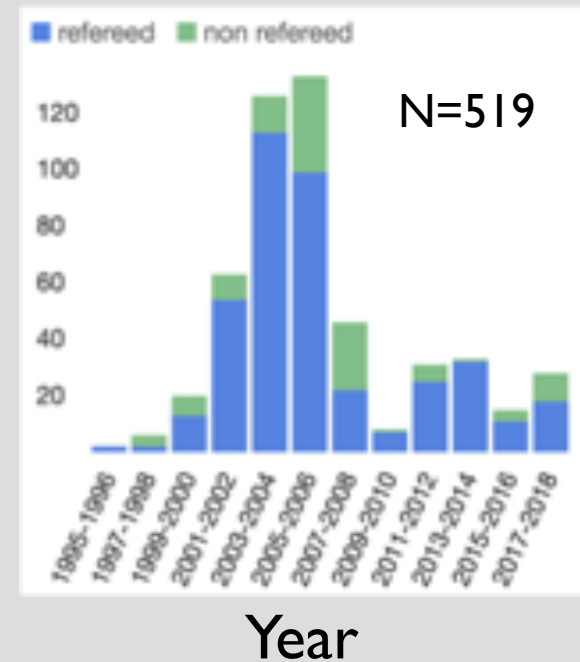
“Hello. After reading carefully the manuscript I would like to be included as a co-author in this work.”



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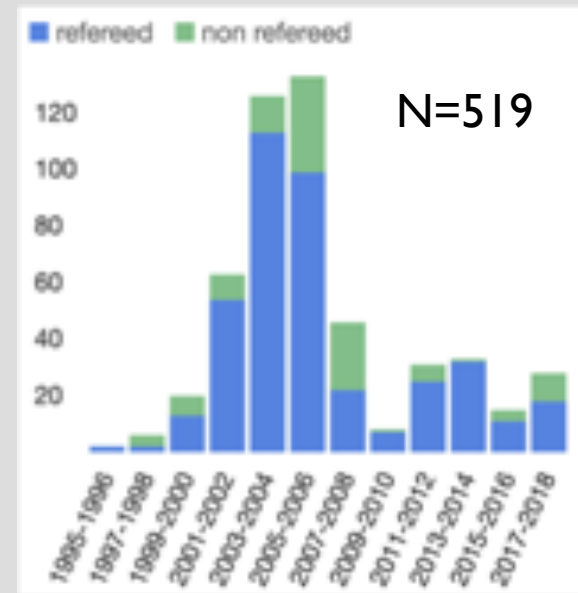
Co-Authored Papers



THE FACELESS MEN (OR WOMEN)

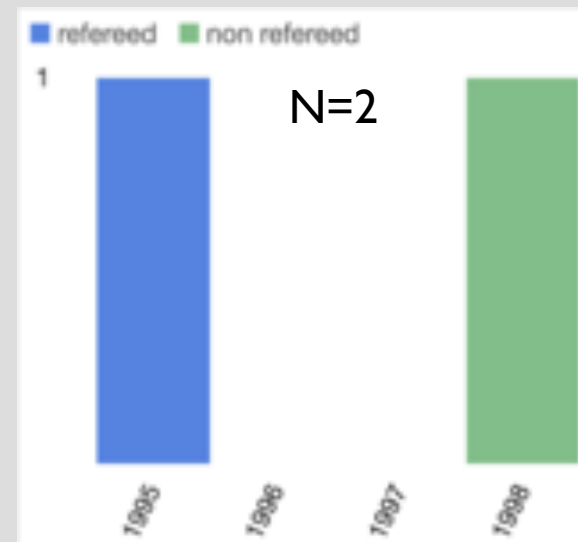
“Hello. After reading carefully the manuscript I would like to be included as a co-author in this work.”

Co-Authored Papers



Year

1st Authored Papers



Year

PARTING WORDS OF ADVICE

- Include everyone on your projects and papers
- Invite collaborators – close and otherwise
- Contribute to other people's work, let them contribute to yours
- Always say some form of “great paper/project” in your emails
- Find something to work on when you're listening in on telecons