High School Teachers and Students Working with Astronomers on Current Research

NSTA Los Angeles 2021
John Taylor
Senior Director of STEM Education
Ethos Innovation Center
Elkhart, Indiana
Fun with some really cool astronomy, and passionate researchers and teachers (and their students).

- NSTA National Harbor 2021
- John Taylor
- Former High School Physics teacher
- Senior Director of STEM Education
- Ethos Innovation Center - Indiana
Questions this session will try to answer…

• Who is this Guy?
• What is NITARP?
• Do we really get to do *real, current* Research?
• Do *students* do any real science?
• How difficult is this to pull off?
• Why should I want to do this?
• How and When do I apply?
Who is this guy?
What is NITARP?

NASA / IPAC Teacher Archive Research Program

- Partners small groups of teachers with a mentor astronomer.
- Mission: to expose the public to “how science works” by experiencing the process of scientific research.
Research?  Yes!  Real Research.
Yes. Real research!
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How difficult is this to pull off?

- Takes time: weekly or biweekly zoom sessions
- Well supported – peers and researchers
- Students optional (but, you will want to)
- Depends on your interest, (and of students.)
- You will get out what you put in.
- Funded by NASA – you (+ 2)
Why should I want to do this?

- It’s fun! And, addictive.
- You’ll learn real research astronomy. It will change your teaching.
- Friendships.
- PR: Get noticed—get on television, in the newspaper, in other media outlets.
- It makes you / your students look good, the program look good, and your school look good.
- Create future life opportunities for students.
- Provides opportunities for you in your school and other…
Timeline

- Apply Summer
- Get accepted! Fall
- Orientation at AAS (astro) Winter Meeting Winter
- Start learning – research – meet – plan Spring
- Write a research proposal – select students Summer
- Travel to Caltech Fall
- Work on research Winter
- Present at next AAS Winter Meeting Winter
- Continue and share Future>
Orientation at AAS #1

What is NITARP?
Applications come out during the summer.

https://nitarp.ipac.caltech.edu/
Your questions...
VERY Short course on Young Stellar Objects:

- Finding “Baby Stars”

Visible Blue to Red

Far Infra red
Other Talks by ETHOS Innovation Center Staff

Friday, December 10
11:00 AM – 12:00 PM

- Hands-On Workshop: Welcome to the Inquiry Zone!
- LA Convention Center – Room 506