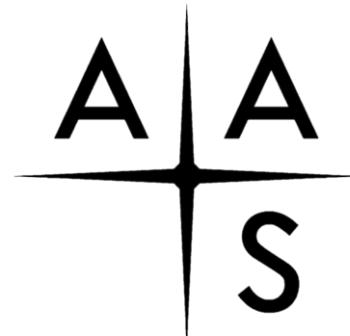




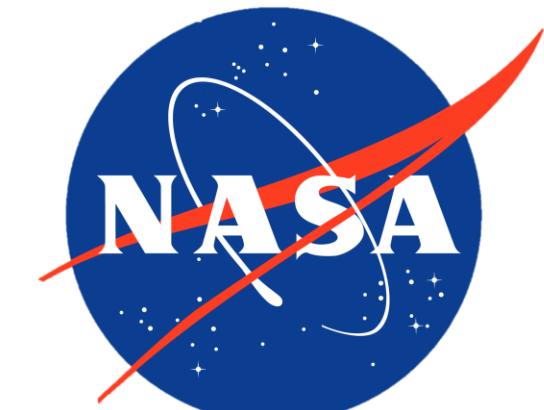
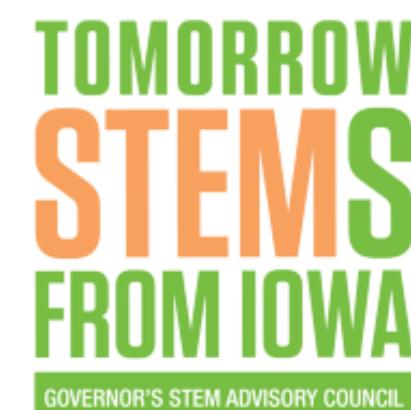
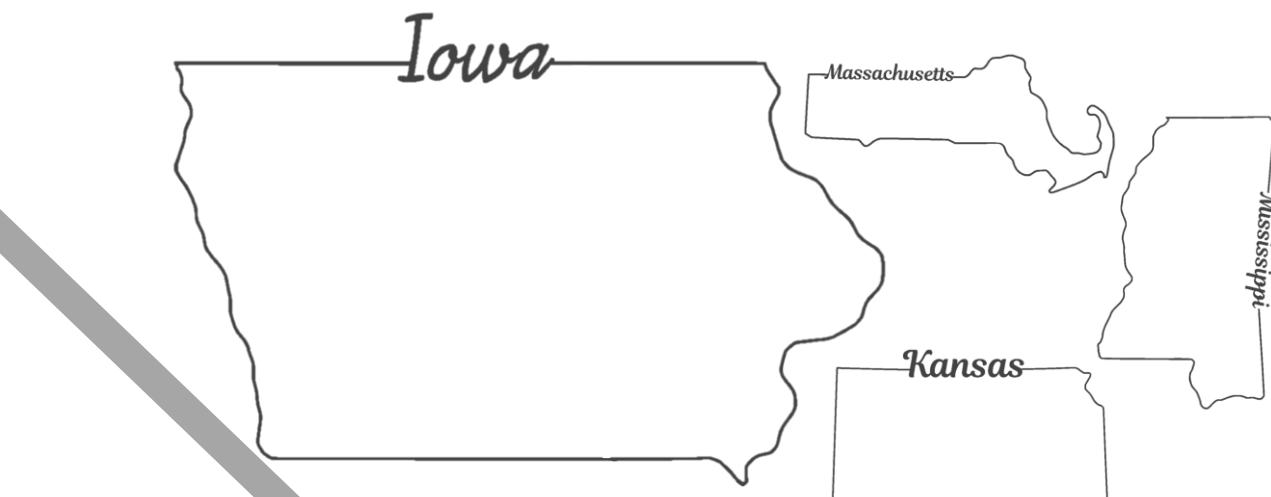
The NITARP Splash and its Ripples

NASA/IPAC Teacher Archive Research Program

Bechtel, Michael Dean



2019 - 233rd
AAS meeting



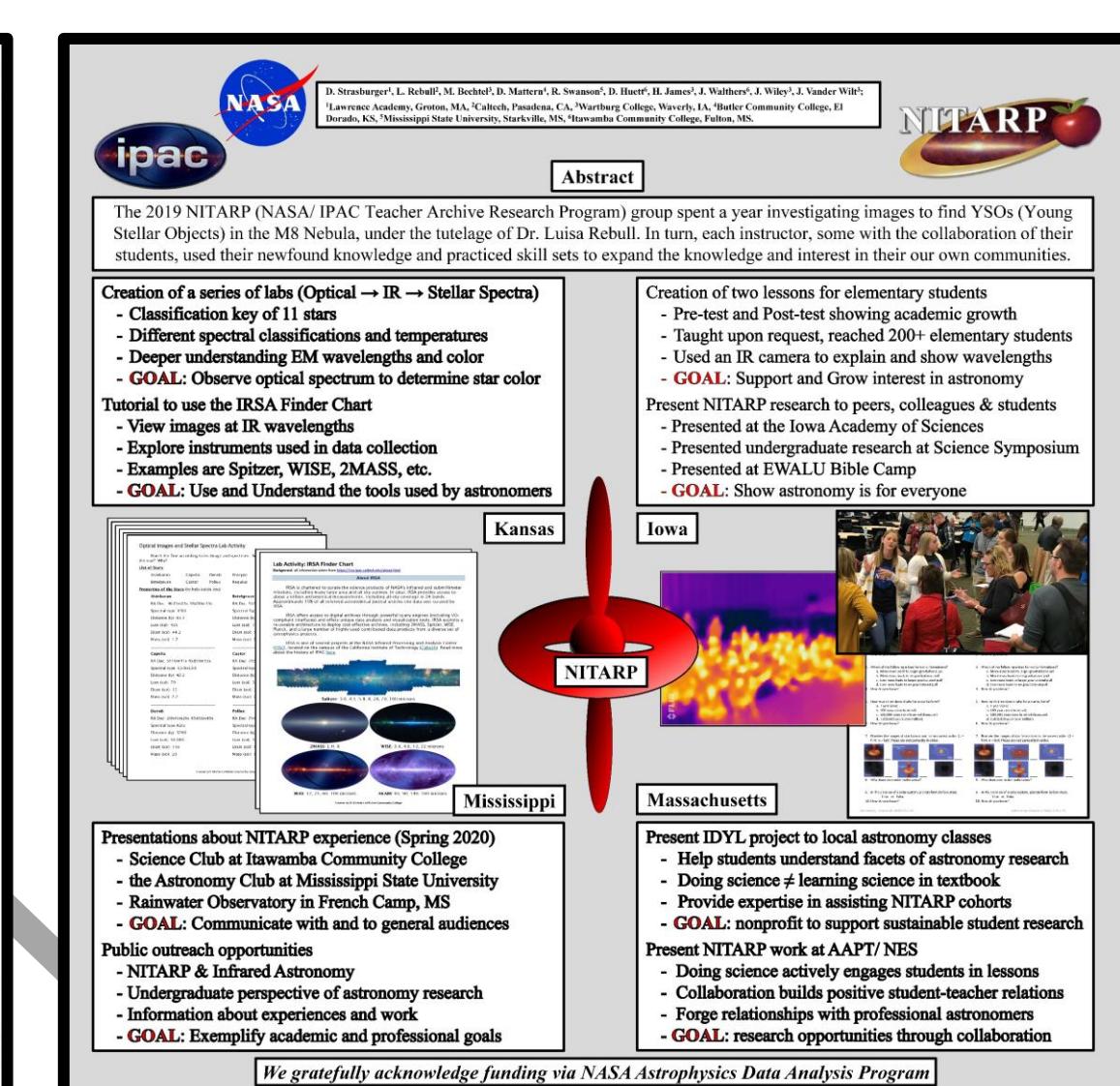
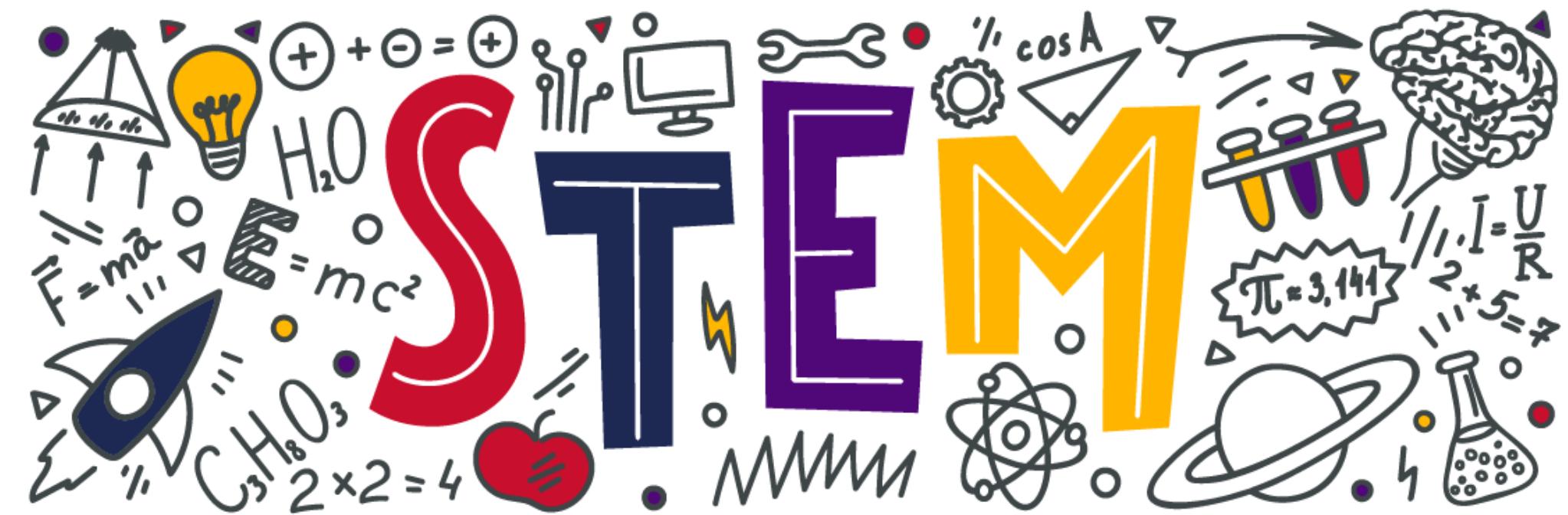
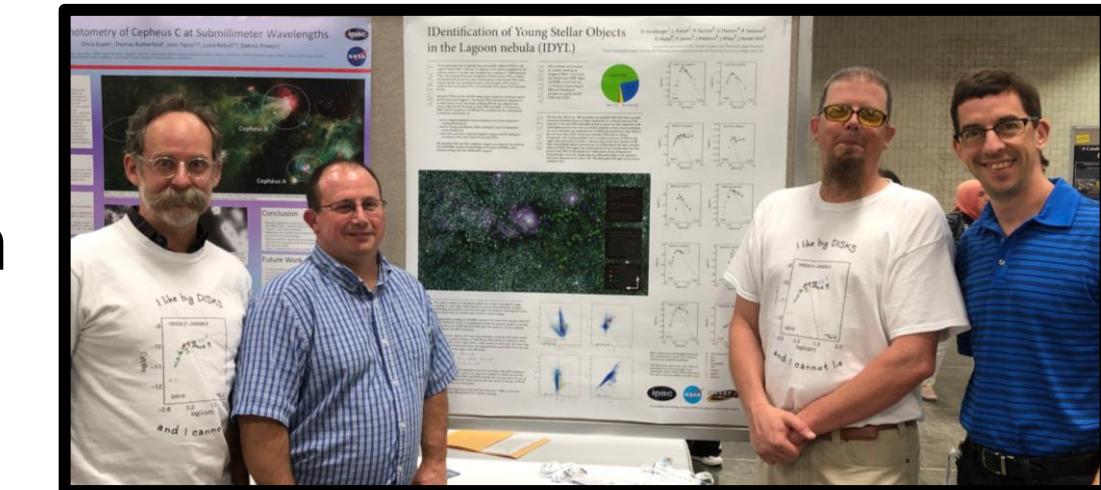
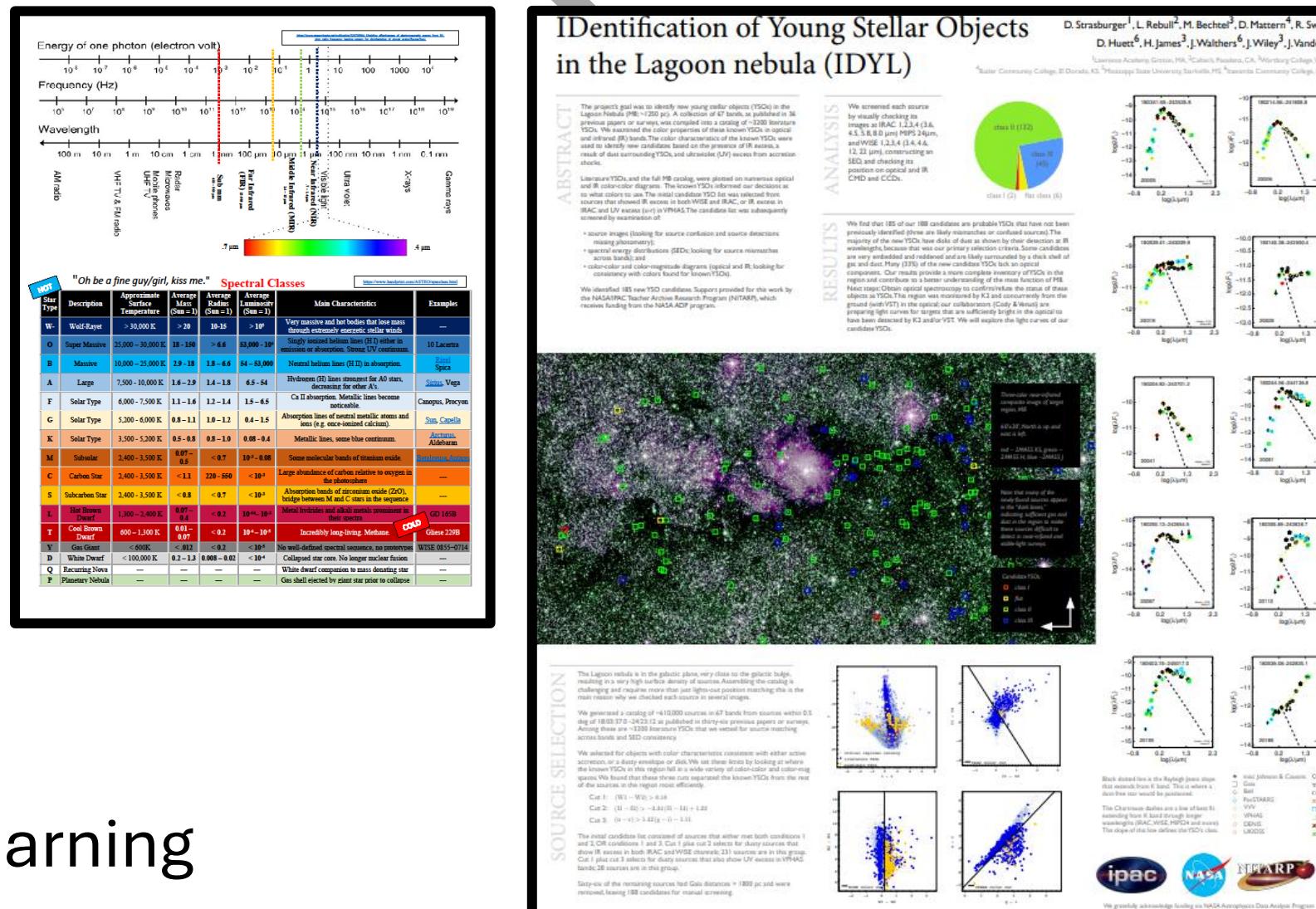
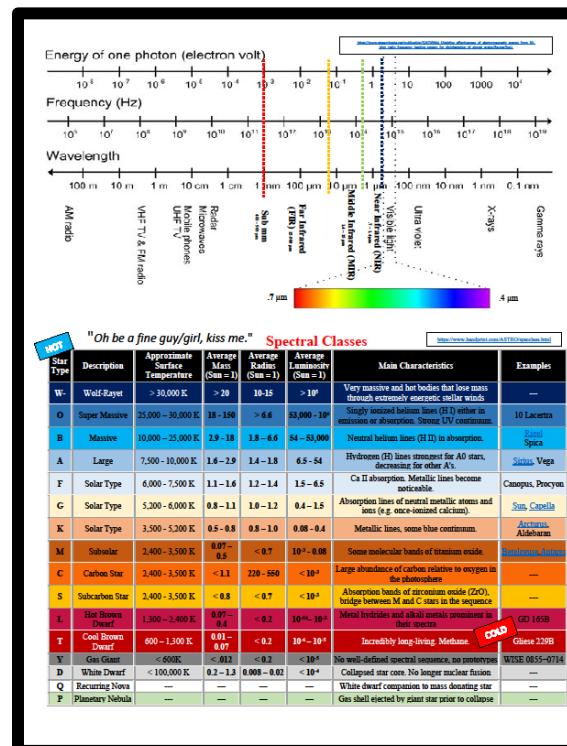
The 2019 NITARP Rebull team was mentor David Strasburger (MA), Danny Mattern (KS), Bob Swanson (MS), and Mike Bechtel (IA) and each bringing 1-3 students. The 6 program commitments are: attend initial AAS, year-long remote work, summer PD in Pasadena, attend concluding AAS, serve as NASA/ NITARP ambassador, and mentor teachers.

My involvement

- Desire authentic research experience
- Use archived astronomical telescope data
- Elevate understanding of infrared processing
- Increase competency in astronomy education
- Engage in a like-minded cohort with educators
- Co-learn with my students, building self-efficacy

My students' involvement

- Learn about educationally transferable aspects of astronomy
- Create NGSS-aligned lessons for use in future units and projects
- Participate in hands-on, data-driven STEM experiences
- Attempt and accomplish research outside comfort zone
- Generate and practice collaborative learning



Johanna Vander Wilt

3rd Grade Teacher
Waukee School District

Reflections

"I definitely didn't expect to find myself doing real astronomy research, but that ended up being exactly what made the experience so special."

"I've talked about NITARP so many times since then; in job interviews, with students, even with new friends, because it's such an interesting thing to share."

"It felt surreal to know that the work we did was real research, and that we were doing it alongside NASA astronomers."

"Turning big scientific ideas into kid-friendly lessons helped me see how much curiosity younger students can bring to science when they're given the chance."

"Looking back, NITARP pushed me to work with new people, persevere through hard tasks, and dive into a field I didn't know much about."



Jennifer Wiley

6th/7th Grade All Science Teacher
Iowa Falls-Alden School District

Reflections

"It was the lessons we developed and experiences we had that supported me in becoming the science teacher I am today."

"I had no idea the depth of knowledge I was about to experience but I wouldn't change it for the world."

"This experience meant the world to me as I was able to apply that learning to my job of teaching the next generation of scientists."

"I also focus on creating memorable, hands-on exploration and pushing to learn more than ever thought possible just as I was able to with NITARP."

"I have used the lessons we created as a team in my own classroom and have shared with students what real life scientific research can look like."



Hannah (James) Dahle

Special Education Teacher
Owatonna School District

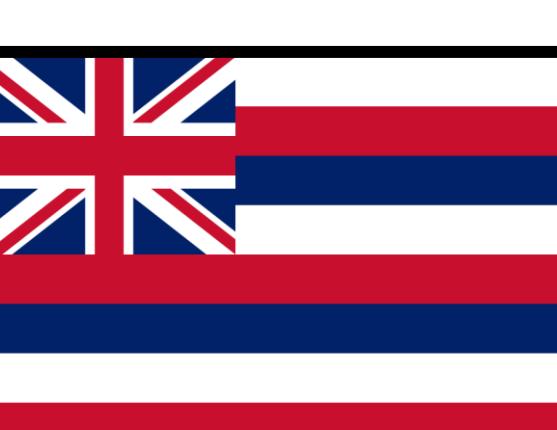
Reflections

"I began to see science as something collaborative, ongoing, and deeply human."

"Being trusted to engage in real scientific research, rather than a simulated classroom experience, changed how I viewed science and my own role as a learner."

"The experience also highlighted that authentic research is often messy and difficult and requires drawing on your team for support."

"Because of NITARP, I continue to look for authentic, developmentally appropriate ways to bring those same ideas into my classroom across all content areas."



2020 – 235th
AAS meeting



2026 – 247th
AAS meeting

... and the saga continues

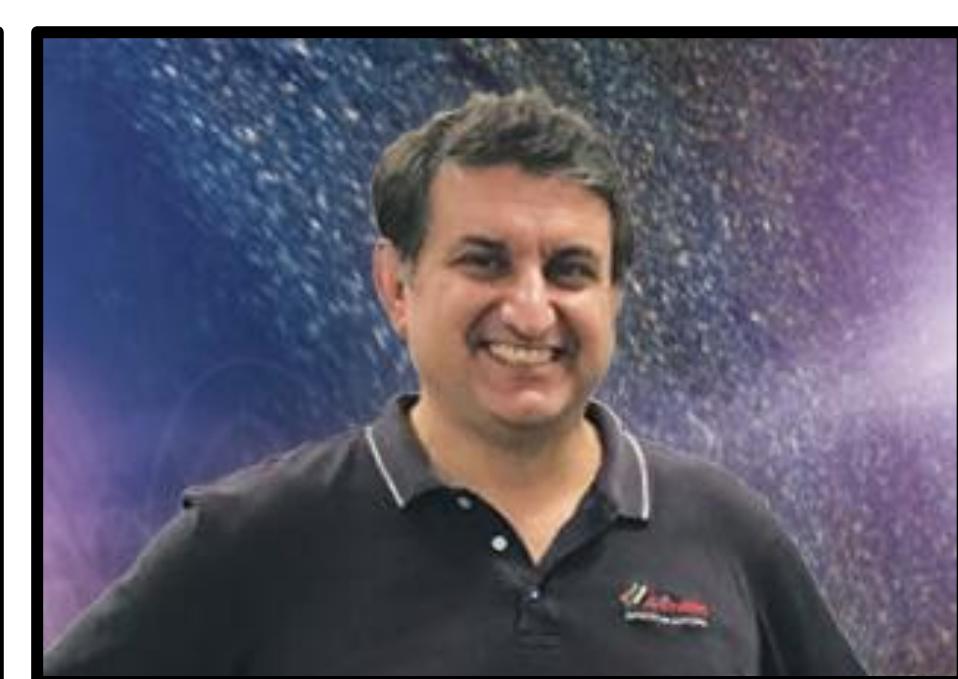
2026 Rebull NITARP states
Iowa **New Hampshire**
Oregon **Pennsylvania**
Tennessee **Wisconsin**

2026 Gorjian NITARP states
Texas (2) **Illinois**
Tennessee **Maine**

2026 Wartburg NITARP group
Angela Bettess
Abra Freeman
Ashlyn Scharr



Dr. Luisa Rebull
NASA/IPAC Infrared Science Archive Director



Dr. Varoujan Gorjian
Research Astronomer at JPL