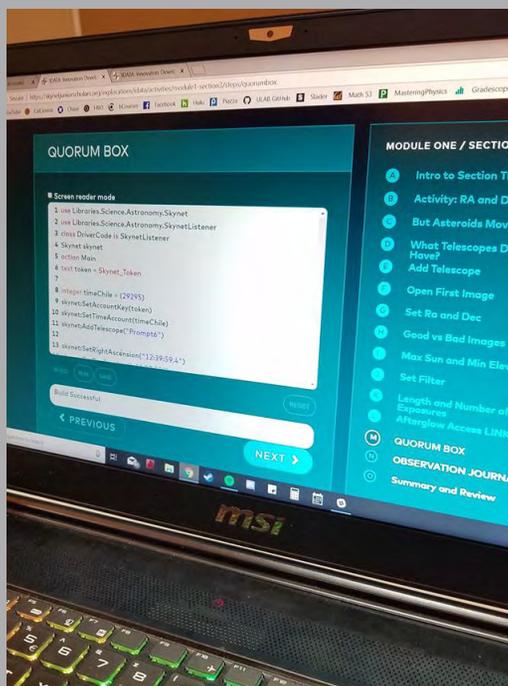


# Quorum Programming

High-school students will be learning the Quorum programming language through the Skynet Junior Scholars website to instruct telescopes at the Cerro Telolo Observatory in Chile to capture images of asteroids. They will then work collaboratively in groups to bring that image into the Afterglow software to analyze the data acquired to determine shape and size.



**S**TUDENTS will be learning how to make astronomy and programming accessible to all. They will be working with programmers with both the Quorum and the Afterglow software to determine if there is a better way for people with visual impairments to access it.

Students will be asked to comment and offer suggestions in GitHub. There is a \$25 fee for course materials.

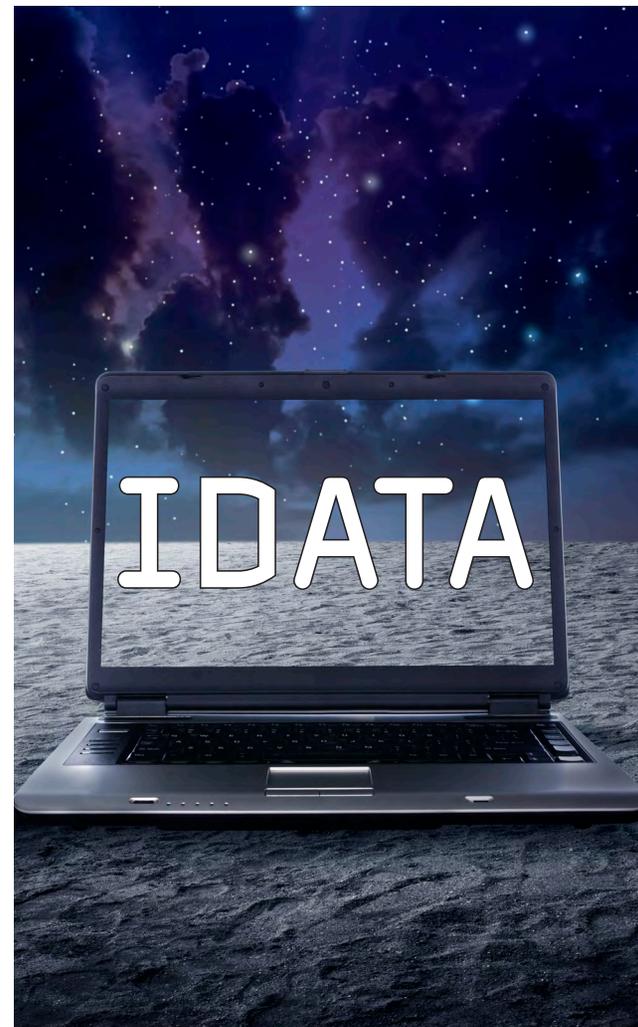
**To get in contact**, please email Barbara Stachelski at [bstachelski@sbcglobal.net](mailto:bstachelski@sbcglobal.net)

**More information** can be found at <http://www.spedsteamc.com>

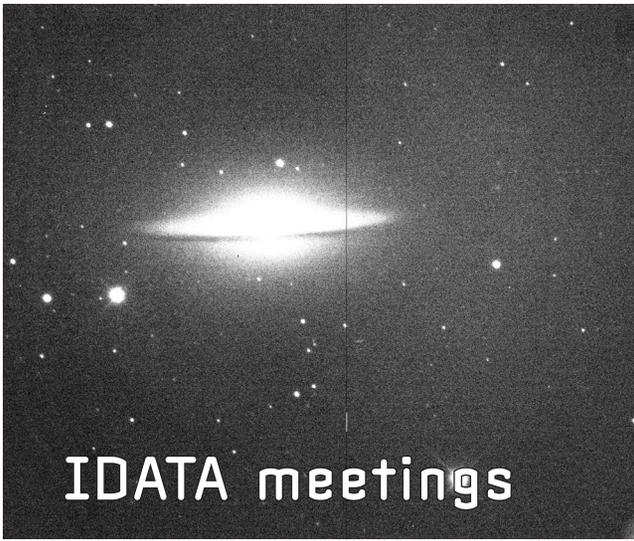
**St. James Faith Lab** at  
St. James Episcopal Church  
3209 Via Lido  
Newport Beach, CA 92663-3973  
Phone: 949.675.0210  
[info@stjamesnewport.org](mailto:info@stjamesnewport.org)



St. James | FAITH LAB



*Innovators  
Developing  
Accessible Tools  
for Astronomy*



## IDATA meetings

Classes will be held on Wednesday from 4:30 to 6 p.m., starting Sept. 12, 2018 at St. James Episcopal Church at 3209 Via Lido in Newport Beach, on the Lido Peninsula.



**T**YPICAL astronomy software displays data visually, which presents unique challenges for blind-and-visually-impaired (BVI) individuals. IDATA will change all of that. Over the next year this nationwide project will partner BVI and sighted students and their teachers, along with astronomers, computer scientists, software engineers, and education researchers, to design and develop a fully-accessible software tool, making astronomy accessible to the blind and visually impaired. You can be part of this exciting effort!

Learn more at <https://skynetjunior scholars.org/>



**R**ESearch suggests that astronomy topics, participation in authentic scientific research, exploration of astronomy topics, and experience with computer science as a part of broader applications of STEM can be powerful motivators for individuals to pursue STEM learning and career opportunities. IDATA project investigators from Associated Universities Inc., the University of Chicago-Yerkes Observatory, TERC-STEM



Education Evaluation Center, University of Nevada-Las Vegas, and Skynet at the University of North Carolina-Chapel Hill, hypothesize that teaming up BVI and sighted students, teachers, and professionals in the design and development of astronomy software and instructional modules will result in more accessible tools for astronomy investigations, powerful educational experiences, and lower the barrier-to-entry for BVI (and all) individuals interested in astronomy and related careers.