



# STEM Career Exploration Lab 2023

## 3D Printing and Astronomy Camp



**Calling all High School Students and Graduating Seniors!**  
**Thinking about planning your education and career journey?**  
**Interested in Science, Technology, Engineering, and Mathematics (STEM)?**

**Join a research study to help improve STEM for students with visual impairments**



**Funded by the National Science Foundation**

**Principal Investigator Dr. Thomas Madura of San José State University**



**As part of this study, use tactile models, sound, and hands-on activities designed for the visually impaired to:**

- *Build a 3D printer and make objects using 3D printers*
- *Learn about the universe from actual scientists*
- *Learn about Moon phases and the inside of the Sun*
- *Hear the Sun and use sound to understand light and waves*
- *Build a constellation in 3D and trace the life cycles of stars*
- *Discover the shape and structure of star clusters and galaxies*
- *Learn about the Big Bang and the structure of the universe*



**Complete surveys and interviews about your experience to help us improve the activities**

**Meet and talk to STEM professionals with blindness/visual impairments like:**

- *Kenneth Silberman of NASA, an Engineer, Programmer, and Patent Attorney*
- *Nicolas Bonne, an Astronomer and Project Lead for the [Tactile Universe](#)*

**Go on free field trips to local museums and STEM businesses!**

**Room and Board for participating students with visual impairments\***

**Twenty-four hour safety and supervision: camp assistants, social activities, and new friendships**

**\*Only for students with visual impairments**

**Limited to the first twenty applicants!**  
**Sighted students also welcome!**

**When: July 31<sup>st</sup> through August 4<sup>th</sup> 2023**

**Where: Maryland School for the Blind**



**For Parental Consent Forms, Details, and to Register Visit:**

**[https://sjsu.qualtrics.com/jfe/form/SV\\_e9idPooLE587702](https://sjsu.qualtrics.com/jfe/form/SV_e9idPooLE587702)**