

Modern astronomical instruments produce such massive amounts of data that astronomers now rely on a diverse array of tools to properly display and analyze this information. The devices in the laboratory enable scientists and the public to explore and interact with these large datasets in specialized ways.

### ULTRA-HIGH RESOLUTION DISPLAYS



Astrophysical systems involve the interaction of objects of incredibly differing scales. Ultra-high resolution displays allow you to simultaneously observe very large and small scale phenomena, helping you to better understand the system as a whole.

### STEREOSCOPIC DISPLAYS



Stereoscopic displays enable you to perceive depth information in 3D environments. These displays provide separate images to each eye, which your brain then combines to understand spatial relationships.

### COLLABORATIVE DEVICES

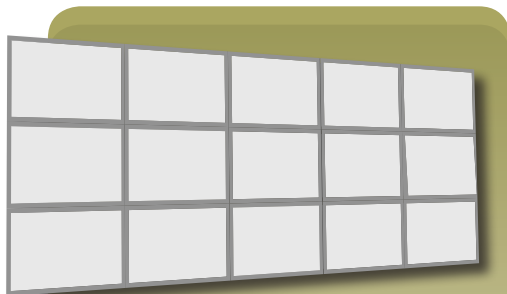


Collaborative devices are large enough to allow several people to experience the same visualization as a group.


### IMMERSIVE DISPLAYS



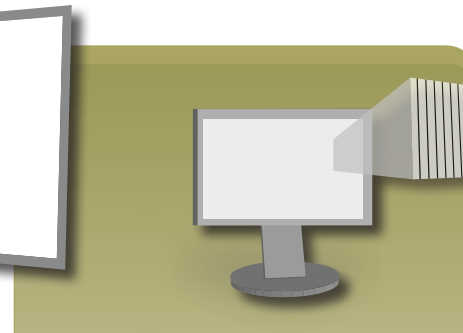
Immersive displays present a wide field of view, which positions you inside a visual experience.




**Tiled Display Wall**



**StereoWall**



**Auto-Stereoscopic Display**



**VisionStation**



Special thanks to the following institutions for the contributions they have made to the Space Visualization Laboratory: Kavli Institute of Cosmological Physics at the University of Chicago, the Electronic Visualization Laboratory at the University of Illinois at Chicago, the MSCOPE group at the University of Chicago, the EVENTSCOPE group at Carnegie Mellon University, the Technology Research Education and Commercialization Center and the Academic Technologies Group at Northwestern University.

# SPACE VISUALIZATION LABORATORY GUIDE

Welcome to the Space Visualization Laboratory at the Adler. In this working laboratory, scientists, technicians, artists, and educators work together to create new ways for you to see the universe. Here you will find prototypes of new interactive visualizations that will eventually move to other areas of the museum. While in the lab, feel free to interact with any active display and attend presentations that take advantage of these innovative devices. Finally, you may be asked about your experience in the laboratory: you are an integral part in designing the next generation of exhibits here at the Adler. Have fun!

## ETIQUETTE

Keep in mind that this is a working laboratory. Be cautious with wires and careful with the equipment. There are several wireless devices in the space; after you are finished exploring, please leave them where you found them. Several systems use special glasses that allow you to see in 3D; please remember to return these glasses before you leave. When in doubt, ask!