



Sponsored annually since 2010 by the Ad Astra Kansas Foundation and Washburn University Department of Physics / Astronomy

- ◆ For a look at past events: [Ad Astra Kansas \(adastra-ks.org\)](http://adastra-ks.org) [Ad Astra Kansas \(adastra-ks.org\)](http://adastra-ks.org)

#### THIS YEAR:

**Astronomy**—it's a wide, wide universe

**Model airplane flight demos** —learn about aeronautics

**Water activity**—we need water both on Earth and in space

**UAS drone** —you'll be surprised how big it is

**Pocket Solar System** —Where is Earth in our solar system?

**Mars rover craft**—design and build

**Telescopes (LARGE and small)**—look through a number of telescopes, some for daytime viewing

**3-D printing and mini-robotics**—print and operate

**Meteorite and geology**—How heavy is a meteorite? Find out.

**Telemetry**—What is it? Find out how it's used for everything from tracking wildlife to space exploration

**Chemistry demos**—will be a WoW!

**Space Place laser-communication game**—send NASA data back to Earth using lasers.

**Oculus goggles**—experience virtual reality

**Fingerprinting activity**—what does it tell you?

**Paper helicopter** —craft illustrating principles of flight

**Critical thinking game**—get your brains working here

**Crane Observatory**— tour of the 1889 Warner-Swasey telescope still used for public viewing.

**"Majestic Beauty of the Cosmos"** NASA video as discovered by Hubble. Awesome. < 5 min.

**Drawings, Take-aways** and more...

#### ◆ PARTICIPATING PARTNERS THIS YEAR include:

- ◆ The Cosmosphere, Foundation for Aeronautic Education, Kansas Children's Discovery Center, K-State Salina Polytech, Kansas Water Office, KU STEMTeach Club, Northeast Kansas Amateur Astronomers League (NEKAAL). Ben Reed, Space Age Publishing Co., Topeka/Shawnee County Public Library, Washburn University Dept. of Chemistry/Chemistry Club, WU Dept. of Geology, WU Dept. of Physics/Astronomy, WU Physics Club,, NASA Solar System Ambassadors (SSA) Jeanette Bosch, Brenda Culbertson, Hallie Hatfield and Sarah Lamm. And more to come...
- ◆ Volunteers are always needed. If you would care to be one, email [contact@adastra-ks.org](mailto:contact@adastra-ks.org).
- ◆ Since 2010 we have sponsored this event in cooperation with the WU Dept. of Physics/Astronomy with the goal to awaken youthful Kansas minds to the wonders of space and science. This annual event is held each April on the Saturday closest to April 24. That date is symbolic in that it connects to Kansas Astronaut Steve Hawley's deployment of the Hubble Space telescope in April of 1990, a source of Kansas pride.

#### Stoffer Science Hall on Washburn University campus

