

Deadline extended to NOVEMBER 19, 2021

CUBESAT MISSION PATCH CONTEST ENTRY FORM



NASA gives all of its missions a special logo / patch. Wichita State University, a partner with the NASA NIAC program (of its Space Technology Mission Directorate) in the new **S.N.A.P.P.Y.** (Solar Neutrino and Particle **PhYsics**) CubeSat mission, would like your ideas.

The winning entrant will have the honor of the design being turned into an official NASA patch which could be flown into space.

The winner's patch will be on the CubeSat and its rocket as well as be worn by the project crew at NASA during Mission Control Operations. The patch will also be displayed at the WSU Science Control Room for a year. WSU is the lead university for this project.

Mission Patch Requirements:

- Open to students in grades 6-12 in Kansas.
- Student's name and school must be the design file's name when submitting.
- All designs submitted will become the property of WSU.
- All entries must come with release forms signed by student and parent / guardian
- Write a one paragraph description of the elements of your design and why you used them.
 This paragraph can be placed under the patch design on the submission or on the release form.

Mission Patch Rules:

- The Mission Patch must be a piece of paper NO LARGER than 3.5-inch x 3.5-inch and stay inside those lines.
- Patch can be b/w or full colors, with a limit of 9 colors. Keep the design simple and clear.
- You may include words but keep it short.
- Computer graphic design programs may be used to create your work; submit full color copy. Hand-drawn designs should be scanned and submitted online.

• **DEADLINE CHANGE:** Due to a technical glitch, the contest deadline has been extended to Nov. 19, 2021

- Winner will be announced Dec. 15, 2021.
- Submit the patch design and release form to <u>SNAPPY</u> submission
- Or send the design files directly to <u>jeanettesteinert@att.net</u> or <u>jill.fisher@wichita.edu</u> Questions? <u>Contact@adastra-ks.org</u>

Design a NASA Space Mission Patch!

Please Print	
Student Name	
Current Grade	School
Parent(s) / Guardian Name	Parent(s)/Guardian Contact-e-mail or phone
Teacher Name	Teacher Contact-e-mail or phone

I Hereby give permission for my child/ward to enter the Mission Patch Design contest and for their name, grade, school, and artwork to be released to NASA, WSU and the media for promotion of the Cube-sat program.

Parent(s) Guardian	Date	
The submitted Mission Patch desig	n is my original work and I understand all judges decis	– ions are final.
Student signature	Date	

Submit the patch design and release form to **SNAPPY** submission or • send to jeanettesteinert@att.net or jill.fisher@wichita.edu

Sample size of patch design
3.5 inches x 3.5 inches
Student name and school
should be the file name of
your submission.
Example:
JohnSmith-Evergreen High



ENTRIES DUE NOVEMBER 19, 2021



The S.N.A.P.P.Y. project is headquartered at Wichita State University. Check out this quick video. Some day that could be YOU doing a NASA project!

NASA gives \$2M grant for WSU professor to study the sun (ksn.com) (< 2min)

What are Neutrinos? Neutrinos are very tiny, elementary particles existing all over the universe that travel at near light speeds. They have almost no mass and no electric charge. They are hard for scientists to study because they have a very small chance of interacting with regular matter. That is why Earth-bound neutrino detectors must be very large. However, the neutrino rate can be 1,000-10,000 x higher in a close solar orbit. So the information a solar neutrino detector spacecraft could give us would let us see inside the Sun and its core, and help understand nuclear fission and other astrophysical forces. Neutrinos are essential ingredients in our universe

What are Cubesats? CubeSats are tiny satellites (4x 4x 4 inches in size / 3 lbs. in weight) used for space research. They carry small scientific instruments for everything from remote sensing, atmospheric research and testing new space technologies, which is what the **S.N.A.P.P.Y.** mission is. Three cubes connected together will form a miniature satellite which will house a neutrino detector. This cubesat will orbit the Earth from dawn to dusk in a Low Earth Orbit over the poles so it will always be in sunlight. The mission aims to prove the enclosed neutrino detector will operate in space. And it will also measure the rates of and example events of the various types of backgrounds that the real detector would encounter close to the Sun from both gamma rays and cosmic rays. It will not detect any neutrinos directly since it is too small. Still it is an important step towards a bigger demonstration spacecraft to go close to the Sun.

More about Cubesats and Neutrinos:

<u>10 Things: CubeSats — Going Farther – NASA Solar System Exploration</u> <u>Nine weird facts about neutrinos (fnal.gov)</u>

Cubesat mission patch images (examples)

Sponsored by Wichita State University. Assisted by the

