

Local students to work on national astronomy program

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Four Buffalo students have been chosen to participate as research assistants in a California Institute of Technology astronomy research program.

Teaghen Sweckard, Katie Wilhelm, Natalie Cahhal and Cassie Hengel will dig into the data under the direction of Clear Creek Middle School science teacher Rick Sanchez.

Sanchez is one of six teachers nationwide chosen to participate in an astronomy research project for CalTech using data from the Infrared Processing and Analysis Center.

"We are studying young stellar objects to contribute to the data on why planets form," Sanchez explained.

All four students will analyze the data and interpret it in a way it can be explained in a formal presentation next January for the American Astronomical Society.

The students were chosen by Sanchez for their work ethic and work they'd done in his class.

"They all stood out," he said. "That's why I grabbed them."

The girls will put their presentation skills to use May 20 during a Star Party at the middle school. It's the first time they'll speak publicly about their work that will begin in earnest in the next few weeks.

It's a low-key opening to a summer of study for Sanchez and his team. They'll spend four days at CalTech in June to work with the scientists overseeing the project and then return to Buffalo to work through the summer.

"When Mr. Sanchez first came up to me, I was at first kind of confused as to why he asked me to join because I'm not a big science person," said Wilhelm. "It's easy for me to do, but it never intrigues me in any way."

The unflappable ninth-grader plans to major in psychology in college and agreed to join the team because of the opportunity to do research for a prestigious project.

Wilhelm welcomes the opportunity to work with good data, and while she's not really intrigued, she is happy to work on a problem that doesn't yet have an answer.

There's no shortage of enthusiasm for Cahhal.

"I love it," she said. "Sixth-grade astronomy was by far my favorite class."

Star Party set for May 20

The public is welcome to attend Clear Creek Middle School's Star Party at 7:30 p.m. on May 20, an event that will include a presentation from four local students who were recently chosen to assist in a California Institute of Technology astronomy research program. The students will talk about their work on the CalTech project.

Presentations from students in CCMS science teacher Rick Sanchez' sixth-grade astronomy class will follow. Sanchez will give a presentation on star formation and a mobile planetarium will be on site.

Once darkness falls, multiple telescopes will be focused on the heavens.

Cahhal missed astronomy class so much, she said she turned to YouTube for astronomy videos.

"Then he asked me to do this project, and I said, 'Of course I want to do this. There's no question about it.'"

Hengel was surprised when she was selected because the project she did in Sanchez' class didn't go as well as she would have liked.

"It didn't go as far as I wanted it to go," she said.

Hengel is looking forward to the real-life research experience.

"I didn't think they would give us the amount of responsibility that they've given us," she said. "It is a huge task to take on actual original research."

Sweckard, the youngest member of the group, is in eighth grade and considering a career in engineering.

"I think it'll be a lot of fun, and it will help me in my future a lot," she said.

Two things surprised her about the project: the amount of math involved and the large technical vocabulary.

She's looking forward to the experience.

"I hope to learn how to research and use my thinking process in a different way," she said. "It'll be a learning experience for everyone."

Funding for travel to CalTech and the AAS meeting next in January are paid by the project. However, funding for only two of his four assistants is included in the program. Sanchez hopes to raise the extra travel money by offering Star Parties to local groups and businesses as fundraisers.