## proves ve tree

itary Science Building and uditorium.

told the committee that 3,000 students already had the main petition to oppose the library in the area. He hoped to get at least 1,000 gnatures today from students

etitions will be considered for proval by the Student Senate

am Easley, University Affairs ittee chairman, said, "If the approves it, letters will be to the administration, the building committee, and

y the chancellor."

Jim Ranz, chairman of the Science Building Committee, o action had been taken by his ittee as of yet.

ce, told police that a color sion and a dinette set had been ered missing from an apartat 518 Frontier Road. The sion and the furniture, which mpany had rented to occupants apartment, were valued at

## Prof's work to go to Jupiter in 1988

By JOHN WILLIAMS Staff Reporter

Inside a room in the basement of Malott Hall, Thomas P. Armstrong and his band of students work to prepare the Galileo space probe for its encounter with Jupiter in 1988.

Armstrong, professor of physics and astronomy, and his students are designing computer programs to help handle the flood of information the space probe will beam back to Earth. They also have designed a physics experiment in the orbiter.

Project Galileo is "even better, much more powerful, much more comprehensive, much more complete and much more detailed" than Voyager, a space probe that encountered Jupiter in 1979 and Saturn in 1981, Armstrong said.

Galileo will uncover a scientific gold mine, he said. It is capable of gathering more data with more sophisticated experiments than Voyager.

"Galileo is an engineering masterpiece, a marvel," he said.

GALILEO WILL CONSIST of an

orbiter and an entry probe and will be launched from the space shuttle.

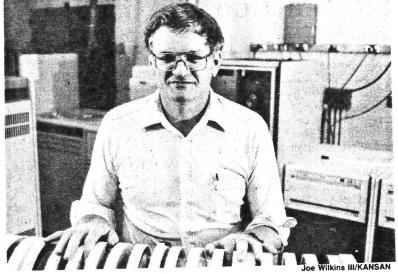
Since Jupiter and its 16 known satellites are like a small solar system, scientists hope they can use data from the space probes to explain the origin of the solar system.

In addition, five field and particle instruments will explore the magnetic and particle fields around Jupiter and its satellites. Armstrong s d he was most interested in these experiments and had helped design one, an energetic particle detector, to study the plasma and energetic particles around Jupiter.

Once in place, the detector's magnets will separate gasses into positive and negative ions, a step needed to measure the density and physical properties of the plasma.

THE TEMPERATURE OF Jupiter's plasma is about 4 million degrees — the hottest plasma ever found, he said. The plasma is diluted, so it does not glow and it will not burn spacecraft passing through it.

The plasma is thought to come from volcanoes on Io, a satellite of



Thomas P. Armstrong, professor of physics and astronomy, displays some tape drives from the Voyager space probe in the physics department in Malott Hall. Armstrong and his students are designing softwear for the Galileo space probe that will explore Jupiter in 1988.

Jupiter. Io is the only other body in the solar system besides Earth that has active volcanoes.

Armstrong said the detector might help answer questions about the plasma.

"It's our responsibility to be as quantitative and accurate and complete about our treatment of this process as we can and bring all the tools of physics to bear," Armstrong said.

Armstrong's association with space probes began in 1962 while in

graduate school at the University of Iowa. In 1964 he became involved with the Mariner IV mission to Mars.

THE NEXT STEP of his professional career began in 1970 when he helped to work on a new proposal to NASA to send intelligent spacecraft on a "grand tour" of the outer planets.

Armstrong also worked at the Jet Propulsion Laboratory in Pasadena, Calif., during the flights of Voyager 1 and Voyager 2.

## CELEBRATE . . . NATIONAL CO-OP MONTH

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