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## Caltech astronomers discover rarity in space

PASADENA — Caltech astronomers have discovered a rare heavy-hitter in a cloud of molecules 1,000 light-years from Earth. The ammonia molecule in the Barnard cloud, within the constellation Perseus, has a nitrogen atom sharing space with three heavy hydrogen — or deuterium — atoms.

"From simple statistics alone, the chances for all three hydrogen atoms in an ammonia molecule to be replaced by the very rare deuterium atoms are 1 in a million billion," said Caltech physics professor Tom Phillips.

- From staff and wire reports