

# Planets with 2 suns may host life?

## Shielded From Solar Winds, Binaries Could Be More Habitable: Study

**New York:** Planets with two suns — like Tatooine in the Star Wars movie series — may be more capable of supporting life than other planets, a new research has claimed. The dual suns of the Tatooine-like planets might actually help prevent damaging solar winds from bombarding planets in their system, allowing for a wider “Goldilocks zone” of habitability, Joni Clark, an undergraduate student at New Mexico State University, said.

He presented his research at the 222nd meeting of the American Astronomical Society in Indianapolis, SPACE.com reported. “(The stars) calm each other down,” Clark said, based on her new work that expands on earlier studies examining binaries (planets with two suns).

“It’s like a really good marriage. They vent to each other, and they’re not focused on anything else. They slow each other down and that causes increased mag-



**DOUBLE DELIGHT**

netic protection of the planets,” Clark told the website.

When the stars in a binary are somewhat evenly matched in mass, they can enter into a synchronized dance that keeps solar winds to a minimum. The stars also need to fully orbit one another

within 10 to 30 days to expand the habitable zone. If they drift too far apart, it could put a significant gravitational strain on the orbiting planets.

The magnetic fields of the planets aren’t necessarily boosted in these kinds of binary sys-

tems, Clark said, but they don’t have to deal with as much solar wind assault.

Watery worlds and rocky planets could form in areas of the system that might not be habitable without the double star interaction, he added.

“It also leaves the potential open for smaller planets that have less magnetic field protection to remain habitable as they don’t have to protect themselves from as much as they would in a single star case,” Clark said.

Clark found that some “p-type” planets (that orbit both stars in a binary system) receive 0.7% less flux from solar wind than Earth depending on their position in the solar system.

“Potentially, p-type binaries could have more potential for habitability,” Clark said. In these systems, it’s also possible that habitable alien planets could exist as close-in to their stars as Venus is to the Sun. P11