

A BRIEF ON THE EXO-PLANET AND STAR ASSIGNED TO NIGERIA TO NAME BY IAU.

Within the framework of its 100th anniversary commemorations, the International Astronomical Union (IAU) is organizing the IAU100 NameExoWorlds global competition that allows any country in the world including Nigeria to give a popular name to a selected exoplanet and its host star.

Star: HD 43197

Exo-Planet: HD 43197b

STAR- HD 43197

HD 43197's star type is subgiant star that can be located in the constellation of canis major. The description is based on the spectral class. HD 43197 is not part of the constellation outline but is within the borders of the constellation. Based on the spectral type (G8/K0IV/V) of the star, the star's color is white to yellow. The star cannot be seen by the naked eye, you need a telescope to see it. HD 43197 has at least 1 extrasolar planets believed to be in orbit around the star. Using the most recent figures given by the 2007 Hipparcos data, the star is 183.65 light years away from us. For HD 43197, the location is 06h 13m 35.56s and -29° 53` 50.3 and is determined by the Right Ascension (R.A.) and Declination (Dec.) which are equivalent to the Longitude and Latitude of the Earth.

DISTANCE TO HD 43197

Using the original Hipparcos data that was released in 1997, the parallax to the star was given as 18.20 which gave the calculated distance to HD 43197 as 179.21 light years away from Earth or 54.95 parsecs. It would take a spaceship travelling at the speed of light, 179.21 years to get there. We don't have the technology or spaceship that can carry people over that distance yet. In 2007, Hipparcos data was revised with a new parallax of 17.76 which put HD 43197 at a distance of 183.65 light years or 56.31 parsecs. It should not be taken as though the star is moving closer or further away from us. It is purely that the distance was recalculated. Using the 2007 distance, the star is roughly 11,614,690.31 Astronomical Units from the Earth/Sun give or take a few. An Astronomical Unit is the distance between Earth and the Sun. The number of A.U. is the number of times that the star is from the Earth compared to the Sun. The star's Galacto-Centric Distance is 7,429.00 Parsecs or 24,230.67 Light Years. The Galacto-Centric Distance is the distance from the star to the Centre of the Galaxy which is Sagittarius A*. (<https://www.universeguide.com/star/hd43197>)

EXO-PLANET- HD 43197 b

HD 43197 b

HD 43197 b is a gas giant exoplanet that orbits a G-type star. Its mass is 0.6Jupiters, it takes 327.8 days to complete one orbit of its star, and is 0.92 AU from its star. Its discovery was announced in 2010. Its eccentricity is 0.83 and the detection method is through radial velocity. (<https://exoplanets.nasa.gov/exoplanet-catalog/6636/hd-43197-b/>)

Individuals and groups are expected to freely vote for the name of their choice and also suggest a name/names for the planet and star if so desired.

SUGGESTED NAMES

	SUGGESTED NAMES	REASON
STAR: HD 43197	Zik	Zik sponsored the purchase of the first radio astronomy telescope in Nigeria.
	NigBen	The two major rivers in Nigeria.
PLANET: HD 43197 b	Samokoye	The first Nigerian astronomer.
	Wazobia	A combination of the 3 major languages in Nigeria.

VOTING PATTERN

Individuals and groups are expected to vote freely for the name of their choice and also suggest a name/names for the planet and star if so desired. The following voting methods are also allowed:

1. Direct voting- during outreach events.
2. Online voting- individuals can only vote **ONCE** through this link: <https://www.nasrdacbss.com/cbss-media-events/>
3. Send email of your suggested name to exoplanetnigeria@gmail.com

