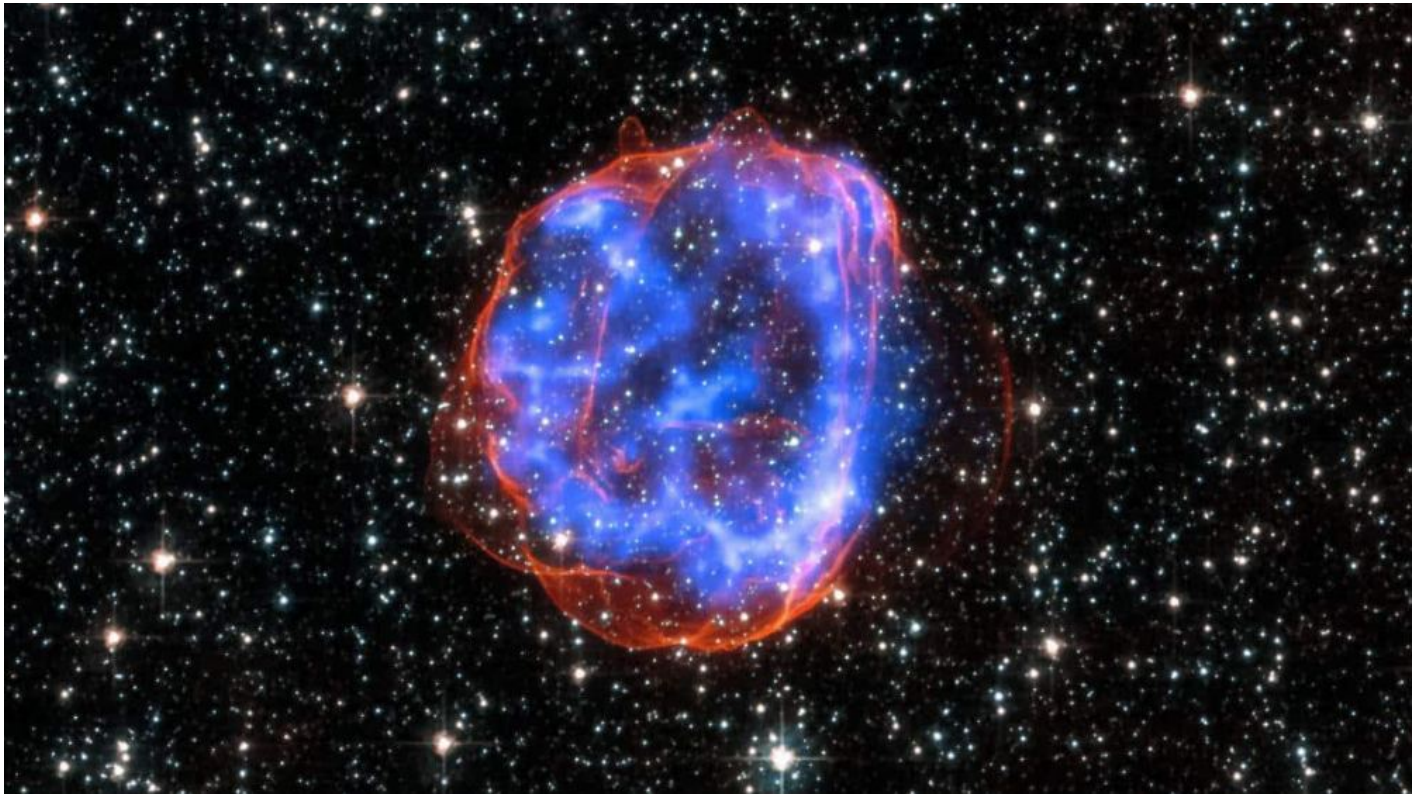


ZARTH App

August 2, 2023 • vajiramandravi.com



About ZARTH App

- The **ZTF Augmented Reality Transient Hunter (ZARTH)** is built along **the lines of the augmented reality** mobile game.
- It allows the user to do serious science while playing a game.

Features of ZARTH App

- The app uses **the open-source Sky Map** and adds data daily from the Zwicky Transient Facility (ZTF)'s robotic telescope at the **Palomar Observatory in California**.
- Palomar is also home to one of the oldest, largest, and most powerful telescopes in the world: the 200-inch Hale reflector.
- The ZTF scans **the entire northern sky every two days** and uses the data to make large area sky maps that have important applications in tracking **near-earth asteroids and studying supernovae**.
- The app is loaded daily with transients detected in real-time by the ZTF.

- The transients include **flaring stars** (variable stars that flare up for a short while), **white dwarf binaries** (burnt remains of dead stars that orbit one another and often merge and explode in supernovae), active galactic nuclei, and several other types.
- The app **ranks transients by their rarity and importance**, and players can compete with each other to score points and earn daily credits, which are duly listed on the leaderboards.

What is a Transients Phenomenon?

- Transients refer to **astronomical phenomena** with durations of fractions of a second to weeks or years.
- Typically they are **extreme, short-lived events** associated with the total or partial destruction of an astrophysical object.

Q1) What is White dwarf binaries?

White dwarf binaries are binary star systems consisting of two white dwarfs orbiting around their common center of mass. A white dwarf is the remnant core of a star that has exhausted its nuclear fuel and has undergone gravitational collapse after shedding its outer layers in a planetary nebula.

Source: [Want to catch a supernova? There's a new app for that](#)

Source: <https://vajiramandravi.com/current-affairs/zarth-app/>

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