



Webmaster's Focus

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Imminent Stellar Nuclear Explosion

Don't worry, it's 3000 light years away and will do us no harm - but we will be able to see it!

T Coronae Borealis appears to be an ordinary cool red giant star, shining at tenth magnitude but spectroscopy reveals a white dwarf companion with a varying doppler shift over a 227 days period.



Corona Borealis and the Blaze Star T-Coronae Borealis.

Click to enlarge

Canon 60D, 50mm, 0.6 sec, f/2.8, ISO 2500

Image & GIF: R. Powell (Macarthur Astronomical Society) 2024-06-28.

For about eighty years, the compact white dwarf attracts material from its less dense companion, until a critical mass is reached. At this point, a thermo-nuclear explosion (nova) is triggered, losing enough mass in the process to begin the cycle again.

The 10th magnitude double star is predicted to rapidly jump to magnitude 2 for about a week. Astronomers are excited because very few novae recur over a predictable time scale. Also of course, everybody wants to witness a (distant) thermo-nuclear explosion! 🤩

The *T Coronae Borealis* nova is predicted to occur any time over the next few months. Keep an eye on it!

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