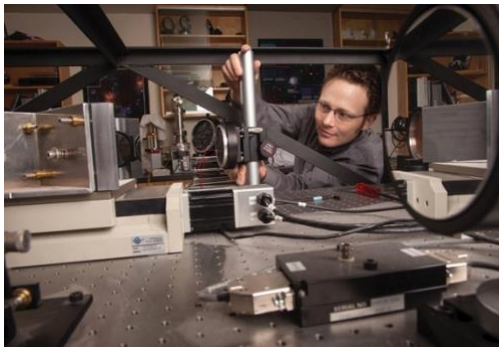


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Rare celestial event to occur on the Winter Solstice

People will be looking up to the heavens Monday evening hoping to catch a glimpse of the Christmas star — the great conjunction that will make Jupiter and Saturn appear very close together in the southwestern sky a few hours after sunset.

On Monday, Dec. 21, Jupiter and Saturn will share the same celestial longitude and appear to pass each other in the sky in what's known as a great conjunction, because these are two largest planets in our solar system. Jupiter has an orbital period of approximately 12 years while Saturn's is about 30 years.



“These great conjunctions take place about every 20 years,” says Dr. Locke Spencer, Canada Research Chair in Experimental Astrophysics with the Department of Physics and Astronomy at the University of Lethbridge. “Some are greater than others because their elliptical orbits do not always bring them as close together from our perspective on Earth.”

For example, during the last great conjunction in May 2000, Saturn and Jupiter appeared to be two full-moon widths apart. This time around, they should appear much closer, separated by the thickness of a dime held at arm's length. The last time they were that close together was about 400 years ago, within a decade of when Galileo first looked at Jupiter and its moon from his telescope. However, it would have been very difficult to see, as it occurred when the planets appeared close to the sun. The last great conjunction as close and as visible as this year's happened almost 800 years ago in March 1226.

“Another grand feature of this upcoming great conjunction is that it is taking place on the Winter Solstice, the longest night of the year for those in the Northern Hemisphere, so, weather permitting, it should be visible to many,” says Spencer. “It should be visible in the southwest sky between Capricornus and Sagittarius, not too far above the horizon. While both are visible to the naked eye, one should be able to see Jupiter's Galilean moons and a faint glimpse of Saturn's rings with good binoculars.”

Cloudy skies in the forecast may not permit viewing on Monday evening, but the days following are forecasted to be clear, allowing southern Albertans a chance to see this rare celestial event for themselves.

This news release can be found online at [great conjunction](#).

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