



**PISGAH
ASTRONOMICAL
RESEARCH INSTITUTE**

Astro Advisory

*Notice of an upcoming
astronomical event.*

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PLANETS, MOON AND STAR REUNITE AFTER LAST MONTH'S ECLIPSE

Rosman, NC (September 5, 2017) – If you were in a favored clear sky location to observe last month's total solar eclipse, you may have noticed during totality the presence of four of the five naked-eye planets lined up on either side of the eclipsed Sun. Astronomers at the Pisgah Astronomical Research Institute (PARI) in Rosman point out that this appearance of planets in a line with the Sun and Moon is not unusual. It is a result of our solar system being very nearly in a plane defined in astronomical history as the plane of the Earth's orbit and called the *ecliptic*.

If you had clear skies during the time of totality on August 21, you may have spotted Venus and Mars to the west of the eclipsed Sun; they were leading the Sun across the sky as the Earth rotates and, thus, have been rising in the east before sunrise. Venus, in fact, has been our "Morning Star." On the east side of the Sun during the eclipse were the planets Mercury and Jupiter; so, they were following the Sun across the sky and setting in west after sunset. While not readily visible, the bright star Regulus was just to the east of the eclipsed sun and within the solar corona. Regulus is the brightest star in Leo the lion and is also dubbed Cor Leoni, i.e., the heart of the lion.

But, that was on August 21. Where are they now? It turns out five of these celestial bodies are moving towards a beautiful reunion low in the predawn skies on the morning of Monday, September 18. Venus, now appears lower as it prepares to pass behind the Sun in *superior conjunction* on January 9. Below Venus is Regulus with Mars lower still. Mercury, the fastest moving planet, has switched sides; it is now to the west of the Sun having passed our central star in *inferior conjunction* five days after the eclipse.

Before the 18th, you will find the waning crescent Moon above this gathering; our celestial companion has just about completed one trip around the Earth since that show on August 21. This celestial show will be lined up in the predawn sky for several mornings before and after the 18th. The thing that is special about that morning is that's the first time the Moon joins the gang since the total eclipse; it will be right in the middle, between Regulus and Mars – a grand reunion!

About PARI

PARI is a public not-for-profit public foundation established in 1998. Located in the Pisgah National Forest southwest of Asheville, NC, PARI offers STEM educational programs at all levels, from K-12 through post-graduate research. For more information about PARI and its programs, visit www.pari.edu.

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