

IU Kokomo Observatory open for Mars watching in August, September

August 8, 2003

KOKOMO, Ind.—It's not polite to stare at the neighbors, but who can resist a peek, when they're a mere 35 million miles away? In late summer, Earth will be in opposition to its neighboring planet Mars, meaning the two will be closer than they have been in centuries.

During 15 nights in August and September, the public can get an even closer look at Mars through the telescope of the IU Kokomo Observatory. Associate Professor of Physics Rick Steldt, Ph.D., along with members of the Kokomo Astronomy Club, will open the Observatory Wednesdays, Thursdays and Fridays from August 20–September 19 (see complete schedule). As always, Steldt said, admission to the IU Kokomo Observatory is free.

The Observatory's 14-inch telescope will be trained only on Mars, while club members Ron Brown and Jim Barnes will make their own telescopes available outside of the Observatory for viewing Mars and other objects in the sky.

To explain Earth-Mars opposition, Steldt drew three side-by-side circles on a chalkboard, representing, from left to right, the sun, Earth and Mars. He connected the centers of the circles with a straight line, showing how the three bodies will align during opposition.

Mars comes into opposition with Earth every 2.1 years, he said, so opposition is not a "rare" phenomenon. However, because both Mars and Earth orbit the sun on egg-shaped paths, the distance between the two planets varies from one opposition to the next. Every 15 years, a "favorable" opposition occurs, meaning the planets are nearly as close as they could be.

"The actual Earth-Mars distance will be as close as it has been in over 1000 years, so Mars will be larger [as seen through a telescope] than it has been since then," Steldt said. Some news sources claim the 2003 opposition poses the best view of Mars in more than 60,000 years, but Steldt said that's debatable hype. "In 1927, the distance was only 1,000 miles further apart than it will be in 2003."

The opposition occurs on August 27. However, Steldt stressed, people looking at Mars through a telescope anytime now through September probably could not detect any difference in how much they can see. "The view on any open house night will be virtually the same in size as on Aug. 27," he said. Barring possible dust storms on Mars, persons looking through the Observatory telescope should be able to see Mars' polar caps and other surface features. As the Earth rotates, and North America turns away from the sun's light, Mars will seem to climb in the sky, and views tend to improve. (If the sky over Kokomo is overcast at the starting time of any open house night—"if you can't see any stars because of clouds"—that evening's session will be canceled, Steldt said.)

Even without a telescope, skygazers can pick out Mars in the south–southeast evening sky, Steldt said. "Mars outshines everything in the sky now. It's orange and sparkling."

Steldt plans to have the IU Kokomo Observatory open to the public for a total lunar eclipse in November and for Earth's oppositions to Saturn and Jupiter, happening in early 2004.

IU Kokomo Observatory Mars Watching

Free and open to public

Wednesday–Friday

August 20–22

9–11 p.m.

Wednesday–Friday

August 27–29

September 3–5

September 10–12

September 17–19

8–10 p.m.

Campus Only Mars Watching

Sunday, September 7

8–10 p.m.

Special evening for campus community and families only.