

**Mars 2012: Opposition and Educational Opportunities at Fernbank Science Center.** E. F. Albin, Department of Space Sciences, Fernbank Science Center, 156 Heaton Park Drive, Atlanta, GA 30307 (ed.albin@fernbank.edu).

**Introduction:** On March 3<sup>rd</sup>, 2012, at 20 hours UT, Mars reaches opposition and is well placed for public viewing. The opposition timeline and educational opportunities are considered, with emphasis on programs presented at the Fernbank Science Center in Atlanta, Georgia. Educational programs include observations of Mars through telescopes, a planetarium presentation, and activities associated with the anticipated August landing of the Curiosity Rover on Mars.

**2012 Mars Opposition:** At opposition, Mars will have an apparent diameter of 13.9 arcseconds and will be visible in the evening sky for a little over a year until it is lost in the glare of the Sun in early April 2013. Between the months of February and September of 2012, Mars can be found moving from the constellation of Leo into the pattern of Virgo. During this period, the Fernbank Science Center will offer public viewing of Mars through the observatory's 0.9 m reflecting telescope on Thursday and Friday evenings. The observatory is open immediately after the evening planetarium program, which is discussed below.

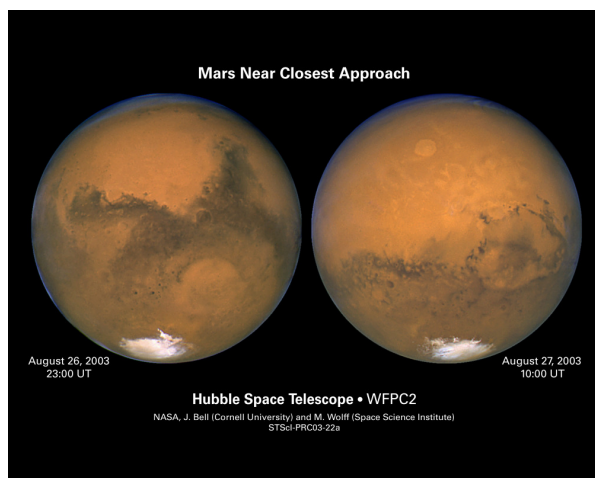


Figure 1. Mars as captured by the Hubble Space Telescope at opposition in 2003. Photo courtesy of NASA.

**“Mars Quest” Planetarium Program:** The Science Center is offering a planetarium presentation to the public about Mars called “Mars Quest.” This program is produced and distributed by Loch Ness Productions and is presented between the months of March and May on Thursday and Friday evenings as well as Saturday afternoons. It chronicles the history of Martian exploration -- from ancient observations to robotic spaceprobes to the plans for future human colonization.



Figure 2. Zeiss Mark V planetarium projector at the heart of the Fernbank Planetarium, where the “Mars Quest” will be presented.

**Curiosity Arrives at Mars:** Launched in November 2011, the Curiosity Rover is now enroute for an August 2012 encounter with Mars. The Fernbank Science Center plans to run continuous NASA Select television coverage immediately prior, during, and after the landing at Gale Crater. In addition, NASA FACTS information sheets about the mission will be available for distribution to the public.



Figure 3. Artistic rendering of the Curiosity Rover on Mars, scheduled to land on August 6, 2012. Photo courtesy of NASA.

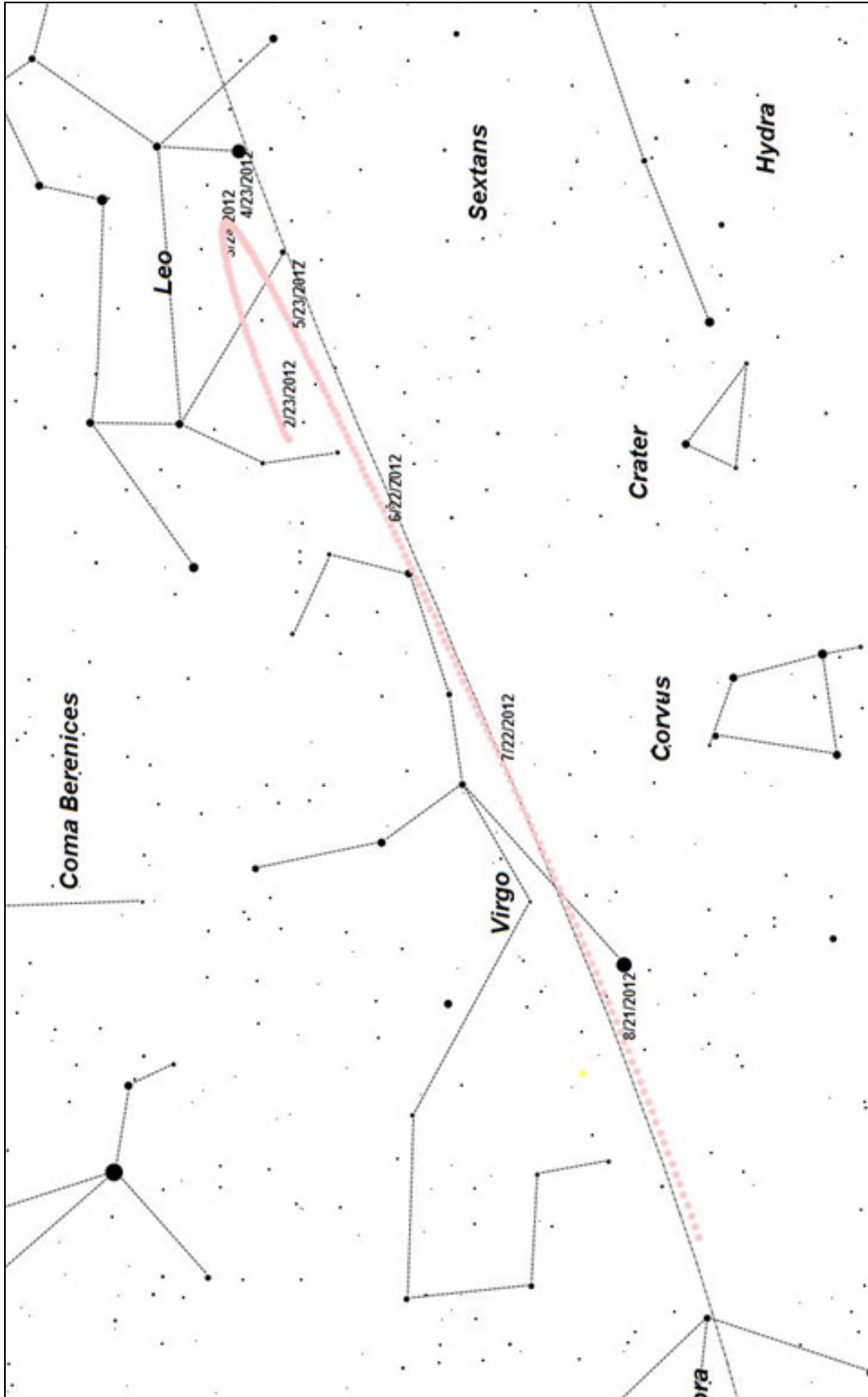


Figure 4. Map showing the path of Mars in the night sky between February and September 2012. During this time frame, Mars moves from the constellation of Leo into Virgo, and is well placed in the evening sky for public viewing. The planet is at opposition on March 3<sup>rd</sup>, and note that it displays retrograde motion from February into March. Image generated with “The Sky” software by the Software Bisque Corporation.