Gargantuan Galaxy packs over two quadrillion suns

Known as the "Big One" to the Spanish, the Monster "El Gordo" galaxy cluster is recognized by the 2014 *Guinness World Book of Records* as the largest distant galaxy cluster to have been discovered.

At seven billion light years from Earth, it took NASA's Chandra X-ray Observatory and European Southern Observatory's Very Large Telescope to discover it.

The cluster has a mass of about two quadrillion (that's 2 followed by 15 zeroes) times that of our sun, leaving astronomers baffled.

Professor Felipe Menanteau of Department of Astronomy from University of Illinois (at Urbana-Champaign), who led a study on El Gordo, stated "this cluster is the most massive, the hottest, and gives off the most X-rays of any



Neel RobertsThe Sky's the Limit

known cluster at this distance or beyond." To put it into perspective, El Gordo is 3,000 times more massive than our home galaxy of the Milky Way, which is more than 125,000 light years in length, according to a Hubble Telescope webpage.

Sky watch

On Tuesday, May 19, look northwest-west at about 9 p.m. As the sun sets, the moon has Mars next to it above the sun while Mercury is above. All are naked-eye

objects.

If you're wondering what that bright star is after sunset in the west, it is Venus. It can be near blinding through binoculars but makes a great photo against the Rocky Mountains at sunset.

On Saturday, May 23, look southeast-east after 9 p.m. as Saturn rises. While you can see Saturn all night with the naked eye, the rings tilting towards Earth at 24 degrees are visible through a good set of binoculars or telescope.

The Eta Aquarids Meteor Shower shoots 10-20 meteors per hour before dawn, peaking this Tuesday to Thursday. The waning gibbous moon will reduce visibility even though it's in the opposite direction. Prime viewing is southeast-east at about 4 a.m.

Public events

Mark down this Friday,

May 8, at 7:30 p.m. on your calendar and join us at the Vulcan Tourism and Trek Station for our monthly star-gazing session. A short indoor presentation will be given on summer stars and constellations, and then we'll go outside and check them out on our 11-inch telescope. Refreshments are provided.

All are welcome to this free monthly event, which is held the second Friday beginning at 7:30 p.m.

For more information, contact Vulcan Tourism at 403 485-2994 or visit www.vulcantourism.

Neel Roberts is a member of the Calgary chapter of the Royal Astronomical Society of Canada. He welcomes your questions and comments at 403-560-6574 and at Neel_Roberts@ptccanada.com.