WESTERN NEVADA ASTRONOMICAL SOCIETY

DESERT SKY

Presidents Message – July, 2012

According to the Associated Press, on Wednesday, July 4th, the European Center for Nuclear Research, or "CERN", the "Organisation européenne pour la recherche nucléaire", winch means "We Frenchmen who microwave croissants", announced that they had "found the missing cornerstone of particle physics, the "God Particle." The scientists are saying this subatomic particle is consistent with the long sought "Higgs Boson." (Not to be confused with "Clyde's Bison", which is not subatomic).

Higgs Boson Clyde's Bison

"The Higgs Boson, which until now has been a theoretical particle, is seen as the key to understanding why matter has mass, which combines with gravity to give an object weight. Now scientists have seen something that may be the particle they've been looking for and can put that knowledge to future use". (Associated Press)

CERN's atom smasher, the Large Hadron Collider (LHC), is a gigantic scientific $10 Billion instrument near Geneva, where it spans the border between Switzerland and France. The LHC has been creating high-energy collisions of protons to investigate dark matter and the creation of the universe, as associated with the commonly believed "Big Bang."

Two separate and independent teams at CERN have said that they both have seen the new (to us) subatomic particle. The two research teams are "CMS" composed of 2,100 scientists, and "Atlas" with 3,000 scientists. Can you imagine the "Geek Level" in the cafeteria at lunch? They reported that it is too early to say whether or not the particle is the "standard model" Higgs Boson, which was predicted by Scottish physicist Peter Higgs in the 1960s. The name "God Particle" was coined by physicist Leon Lederman, a Nobel Prize winner, which denotes its importance in explaining how the subatomic universe got started.

Our very own Alice Sady, WNC & Williams College, who has been a student lab assistant at the Observatory, is in an intern position at the CERN site. We are very proud of her, and look forward to hearing about her experiences. Professor Collier, Observatory Director and Vice-President of our Astronomical Society, will help us understand all this in his lecture at our meeting next Tuesday evening.

Mike Thomas

June, 2012

June 2012 Meeting Minutes

- No Minutes
- No membership Meeting for June 2012

WNAS Officers

President	Vice President	Treasurer/Secretary	Newsletter Editor	Webmaster
Mike Thomas	Robert Collier	Brian Guerin	James Bean	Doug George
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Monthly Membership Meeting 7:00PM, Tuesday, July 17, 2012 Guest Speaker:

Professor Robert Collier

Presents:

"Cosmic Rays to the God Particle, an Overview"

Events Calendar

~ July 2012 ~						
Sun	**Mon**	**Tue**	**Wed**	**Thu**	**Fri**	**Sat**
1	**2**	**3** Full Moon 	**4**	**5**	**6**	**7** Star Party
8	**9**	**10**	**11** Moon Last Qtr 	**12**	**13**	**14** Star Party
15	**16**	**17** ***WNAS Meeting 7pm JCDO***	**18**	**19** New Moon 	**20**	**21** Dark Skies Star Party
22	**23**	**24**	**25**	**26** Moon 1st Qtr 	**27** ***Southern Delta Aquarids meteors**	**28** Star Party ***Southern Delta Aquarids meteors**
29	**30**	**31**	**Notes: *** The Delta Aquarids can produce about 20 meteors per hour at their peak. The shower peaks on July 28 & 29, The radiant point for this shower will be in the constellation Aquarius. Best viewing is usually to the east after midnight.			

~ August 2012 ~						
Sun	**Mon**	**Tue**	**Wed**	**Thu**	**Fri**	**Sat**
August 5th/6th Curiosity Rover to land on Mars http://www.space.com/16465-mars-rover-curiosity-red-planet-landing.html			**1**	**2** Full Moon 	**3**	**4** Star Party
5 Curiosity Rover Landing on Mars?	**6** Curiosity Rover Landing on Mars?	**7**	**8**	**9** Moon Last Qtr 	**10**	**11** Star Party
12 **Perseids meteors**	**13** **Perseids meteors**	**14**	**15**	**16**	**17** New Moon 	**18** Dark Skies Star Party
19	**20**	**21** ***WNAS Meeting 7pm JCDO***	**22**	**23**	**24** Moon 1st Qtr  ***Neptune at opposition**	**25** Star Party
26	**27**	**28**	**29**	**30**	**31** Full Moon (Blue) 	**Notes:** *Neptune's closest approach to Earth