

Mike's Summer Lecture Series 2014

All 5 of these lectures happen on Saturday evenings at Mike's home in Carefree. The potluck is at 5:30. The lecture begins at 7pm. Two of these lectures have Star Parties planned for after the lecture. Lectures without Star Parties after, will have a movie. Bring a movie to share. Everyone is welcome! Sign up in PerfectPotluck.com with the Main Dish & Drink you plan to bring and share. See links below for Potluck RSVP. Attendance RSVP is required with Mike at Primefactory@q.com. When you RSVP, please tell Mike the number in your party so he can be sure to have a chair set up for your comfort.

Lecture #1: June 14: "The Electromagnetic Universe" While $E = mc^2$ shows that matter is energy, I will show the form & electromagnetic functions needed to make matter in the universe. The strong & weak forces have been unified with electromagnetism, but gravity is complex shadows of the energy universe. Real matter & antimatter are circulating rings of energy while virtual matter & antimatter are made when energy is out of phase during destructive interference. While my models of elementary matter demonstrate the physical properties of quantum electrodynamics & quantum chromodynamics, I basically built them from neutrinos, so quarks are ultimately made of leptons.

A movie will follow this lecture.

Here's the link to find out more details about this Lecture:

<http://www.pasaz.org/forums/calendar.php?do=getinfo&e=1314&day=2014-6-14>

Lecture #2: July 12: "Earth Shattering Evolution" The gas giant planets began inside a Herbig/Haro jet that was focused from a supernova shell that swept into our massive dusty knot that was imbedded in a molecular interstellar gas cloud. Jupiter set the planetary distance relationships so the inner planetary disk of dust and condensed rocky debris quickly form rings that then rain material down on rapidly growing solid planets and moons. The impact history of the solid planets & some of the large moons are similar to the large impacts that grew the Earth into the largest solid object in our solar system. Every major & most minor geologic ages began with a significant asteroid strike. Phoenix's Precambrian mountains & geology are the ejecta blanket debris of the largest ancient impact to occur in the solar system.

A Movie will follow this lecture.

Here's the link to find out more details about this Lecture:

<http://www.pasaz.org/forums/calendar.php?do=getinfo&e=1315&day=2014-07-12>

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Lecture #3: July 26: "Planetary and Stellar Jets" In cometary dust tails 10 micron and larger dust basically follow the comet's orbit and each is capable of focusing a tiny plasma jet from the passing solar wind that are miniature versions of the comet's powerful gas tail. Strong north & a south string polarities conduct large voltages, currents, and ions. Cometary magnetotails light up the entrained gas like a florescent tube making the gas tail easier to see. Asteroids, moons, & planets can have strong magnetic fields that give clues to how stars stellar core's can burn hydrogen away from the core. Understanding how planetary & stellar jets are made, allows jets to be read like they are books. There are special circumstances that allow relativistic stellar jets to erupt from condensed stars. A Star Party (weather permitting) may follow this lecture, and if the weather cancels the star party, a movie will follow this lecture.

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Here's the link to find out more details about this Lecture:

<http://www.pasaz.org/forums/calendar.php?do=getinfo&e=1316&day=2014-07-26>

Lecture #4: Aug 9: "Galactic Jets and Cosmic Evolution" builds on concepts presented in the previous lecture. Open cluster stars and globular cluster stars have different origins and histories. In my version, spiral and dwarf galaxies are made from giant elliptical galaxies. Giant elliptical galaxies are made by Cygnus A* (3C405). Galactic jets tell a long and detailed story of galactic birth & death across an older universe, than you might think. Here's the link to find out more details about this Lecture:

<http://www.pasaz.org/forums/calendar.php?do=getinfo&e=1317&day=2014-08-09>

Lecture #5: Aug 23 with Star Party: "Upcoming Astronomical Disasters" The universe is a dangerous place, but we can see what's coming. The next supernova shell is coming soon. At least two halo stars will pass close to our solar system. Continuing small collisions make asteroid's orbits unpredictable. Radiation exposure & magnetic reversals of the Sun and Earth. Eta Carinae could blow apart part of our galaxy as a hypernova tomorrow! A Star Party (weather permitting) may follow this lecture, and if the weather cancels the star party, a movie will follow this lecture.

Here's the link to find out more details about this Lecture:

<http://www.pasaz.org/forums/calendar.php?do=getinfo&e=1318&day=2014-8-23>