

Modern Cosmology
 Martin Buoncristiani
 University of the Third Age
 Session 4

<http://ThinkingAndLearningInConcert.org>

News from Mt. Burnett Observatory

Monash Center for Astrophysics Public Lecture

Prof. Chris Tinney
 ARC Professorial Fellow
 Department of Astrophysics
 School of Physics
 University of NSW

The Search for Extrasolar Planets
 6pm, 29 March, 2012
 Monash University

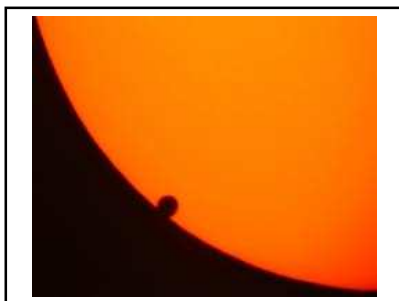
Monash Center for Astrophysics Public Lecture

Prof. Trevor Ireland
 Associate Director
 Research School of Earth Sciences
 The Australian National University

Exploring Asteroids
 6pm, Wednesday 9 May, 2012

Transit of Venus

$R_{Venus} = 0.723$
 $R_{Earth} = 1$
 $T_{Venus} = .615$
 $T_{Earth} = 1$



Some Chronology

1639 - first prediction and observation of the transit Jeremiah Harrrocks.

1677 William Halley - showed how a precise measurement of the earth's radius could be determined.

1761 - Lomonsov discovered Venus has an atmosphere

1769 - James Cook expedition sets up an observatory in Tahiti

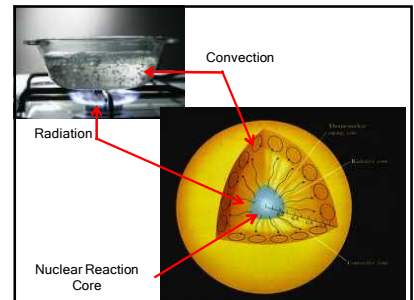
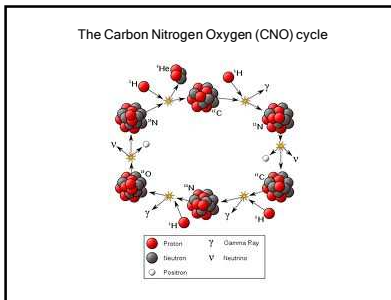
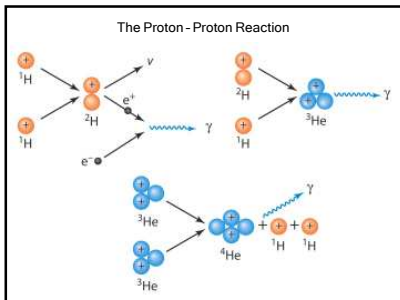
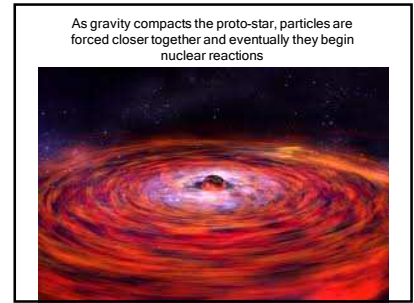
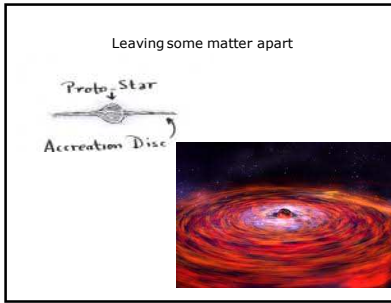
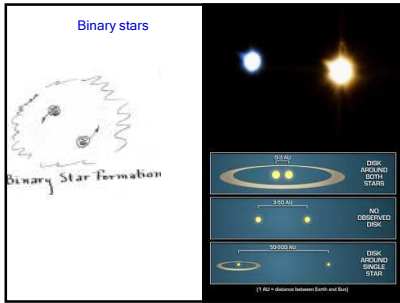
2012 - June 6 C1 - 8:16:17
 C2 - 8:34:15
 C3 - 14:26:49
 C3 - 14:44:40

2117 - Next occurrence

2004 and 2012 Transits of Venus

2004 Transit of Venus
 2012 Transit of Venus

2004 Transit of Venus
 2012 Transit of Venus



Low Mass Stars
 Proton - Proton Reaction
 Radiative Zone Inside, Convective Zone Outside

High Mass Stars
 C - N - O Reaction
 Radiative Zone Outside, Convective Zone Inside

[Activity in the corona](#)

Solar Flare sends Shock Waves

Coronal Mass Ejection (animation)