

"A Brief History of Time-
From the Big Bang to Black Holes"
by Stephen W. Hawking
-best seller of 1988

I question the author's title. If this "history" is supposed to encompass the beginning to the present, some black holes were formed early in the development of our universe. Therefore, the title is misleading in relation to its point in time.

This enlightening book is an introduction to today's most scientific ideas about the cosmos and how our universe evolved from the beginning of time.

* * *

He occasionally questions God as to his purpose and how he controls the universe.

Subconsciously, he is searching who and what God is.

This led me to attempt to interpret this enigma.

The author gave me the impression that God is a combination of all forces in the universe and that we will truly know him when we learn the 'grand unified theory' completely. The 'grand unified theory' being our understanding of all forces as one.

Through this power, is this how God controls the universe?

by Harold Moorin

Lunar Laughs!

"When has an astronaut going to Mars by spaceship the most reason to feel flat?"
(When he is a board! "Get it?")

"What came into being at the same time as the Earth, will probably exist as long as the Earth, but is never more than five weeks old?"
(The moon ... "ba-dum-bum!")

Notes From Our (temporary) Editor

I would like to begin by saying that the position of editor can be scary and rewarding just the same. I enjoy knowing that all of the Phoenix Astronomical Society members are receiving my composition. On the other hand, I lay awake the night after mailing the PASTimes, waiting for a mob to pound down my door.

The point made is this: if you or someone you know has energy and is creative, has a few hours (no more than five) a month and has a strong front door- we need a permanent editor.

If ANYONE, ANYwhere in ANY corner of the galaxy has something to say that will interest the members of the Phoenix Astronomical Society, well MY STARS! is had better be said. And that goes DOUBLE for astronomy related advertisements, jokes, or copopies of photos that may be submitted to PASTimes. Just beam it on over to Kai Staats, the struggling temporary editor.

Observation without Reservation

According to Richard Hill from Kitt Peak, who is the record for ALPO (Association of Lunar & Planetary Observers), activity of sun spot groups and solar flares is increasing dramatically. He urges that activity has come upon us and now is the time to get out and observe the sun. Groups 5060, 5062, and 5075 have produced some of the most complex visible structures in years. Pat McIntosh of NOAA thinks that 5060 is the largest group since the complex group in June & July of 1982 and among the three largest since 1951! He also said that group 5047, which recently returned as group 5075, is the group that produced the flares all have heard about.

5075 was nearly as large as 5060 which is just coming around the limb so more activity is on tap. His prediction is that this rotation should be as active and interesting as the great cycle 19 of the "igy". The July level of activity should last for another three months and should rise rapidly to levels beyond what we have seen in the last 30 years! He said that this sort of activity should last until the second half of 1992!

As amateur astronomers we can make a valuable contribution to astronomy as well as having fun in observing the sun. You don't need reservations to make observations of this spectacular event. BE CAREFUL however, and never look directly at the sun without a filter of the proper kind. If you have any questions about observing the sun, feel free to contact any of the PAS officers.

"Get out there and observe!"

by Mark Johns

The Yogurt Connection

After reading Mark's article printed in last months PASTimes edition and above, I was inspired to attempt my own solar observations. I was in the desert north of McDowell mountain park last week, camping out with my telescope and tent. The night observations were splended with dark skies and cool breezes. When day broke, the sun rose and the coyotes howled in praise. I had just finished a carton of yogurt when I began to feel the heat of the sun, wondering what I would do to keep busy during the day. It then occured to me: I trained my scope in the general direction of the sun. I held my hand over the sight scope eyepiece, about three inches away. I then moved the scope until the small circle of light fell upon my hand, complete in its image. I then knew that my scope was trained properly without looking at the sun.

Where does the yogurt come into play? Well, in wanting to observe the sun without looking at it, I held the bottom of the white yogurt can directly infront of the telescope main eyepiece. The image was soon clear and focused, giving me an indirect view of the sunspots. I moved the yogurt can towards and away from the eyepiece, bringing the image into focus each time. In this manner I could observe individual sunspots in detail or all of them at once. It was interesting, inexpensive, and safe. Well, almost safe. In the process of using my sight scope I melted the crosshairs, something that never occured to me until it was too late. Please REMOVE any heat sensitive eyepieces BEFORE using my 'yogurt connection' method of observing.

by Kai Staats

President	Kai Staats	253-3077
Vice President	Mark Johns	866-8311
Secretary/Treasurer	Keith Parizek	996-1013
Editor (temporary)	Kai Staats	253-3077
Director	Hermann Andreason	997-8759
Director	Trevor Tuffin	948-3126
Director	Dick Wasson	279-0384

Dues are Due!

This section of the PASTimes is probably skipped-over by the majority of its readers. It's just plain depressing! Waiting for the last second to come is a great game plan... when it comes to launching the space shuttle. However, when it comes to club dues, it is important to get them in as early as possible. This insures that your subscription to Sky & Telescope will not be initiated late, missing one or more issues. Please send your check to Keith Parizek (address below). Thankyou!

----- CLIP AND MAIL NOW WITH YOUR 1988 MEMBERSHIP DUES! -----

PHOENIX ASTRONOMICAL SOCIETY

Membership Dues/Enrollment Form

Name _____

Address _____

City _____

State _____ Zip _____

Phone(s) _____

Telescope Size _____ Type _____

Membership Type:

Individual \$25 ☐ Sustaining \$30 ☐

Family \$27 ☐ Non Sky & Telescope \$15 ☐

Please make check payable to Phoenix Astronomical Society

Keith Parizek
3329 East Mescale Street
Phoenix, AZ 85028