January Meetings

The January general meeting has been changed to Wednesday January 7, 2004.

The January Board meeting is on it's regular night of Thursday January 8, 2004.

Spring Banquet

The Hamilton Centre has a tentative date of May 8, 2004 for our Annual Spring Banquet. Steve Barnes has secured Ivan Semeniuk as our guest speaker for that night.

Ivan Semeniuk - Astronomy columnist

Ivan Semeniuk is the host of Discovery Connection, and "Skylights", the weekly astronomy column on @discovery.ca

Ivan has been a columnist on the show since its inception, and began working as a full time producer in the fall of 1999. Before becoming a science journalist Ivan spent 13 years developing science exhibits, programs and planetarium shows at the world-renowned Ontario Science Centre in Toronto.

During his career chasing the stars and telling people about the night sky, Ivan has been on hand for two Mars landings, witnessed three total eclipses of the sun and transported one moon rock across an international border.

Ivan is a contributing editor to SkyNew magazine and his articles have appeared in Astronomy, Mercury, and NewScientist among other publications.

Ivan completed his undergraduate studies in physics and astronomy at the University of Toronto "back when MIR was shiny and new." He has since earned a Master's degree in Science Journalism from Boston University.

Galaxy Posters

Galaxy Posters are still available. Mike Spicer has copies available for \$10.00 with all proceeds going to the Hamilton Centre.

Astronomy Day 2004 is set for Saturday April 24, 2004. The Hamilton Centre will be planning events for that Day.

Beginners Observing Group

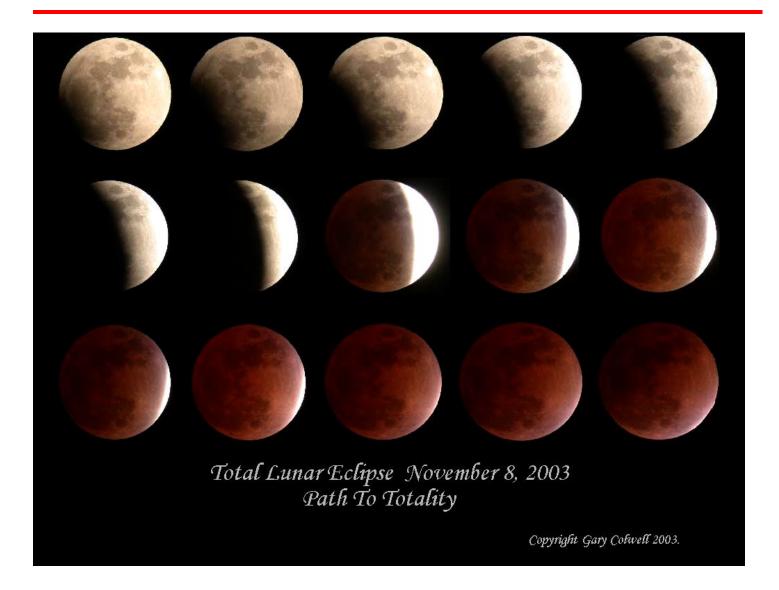
If you are interest in the Beginners Observing Group contact Ken Lemke by e-mail at cfs@worldchat.com (day time) or klemke@worldchat.com (night time or week-ends). His phone number is 905-634-5168 (day time) or 905-639-5127 (night time and week-ends) or Gary Colwell at glcolwell@rogers.com

Hamilton Centre Logo Clothing

Ken Lemke has generously offered to coordinate the sale of various clothing items with a very distinct Hamilton Centre Logo on them. The logo is shown as the header on page one of Orbit. Here is a list of the clothing items and our introductory special prices. If you are interested in ordering items please contact Ken Lemke by e-mail at cs@worldchat.com (day time) or klemke@worldchat.com (night time or week-ends). His phone number is 905-634-5168 (day time) or 905-639-5127 (night time and week-ends). To make the ordering process as easy as possible we are requesting that you pay for your garments upon ordering with a cheque payable to "RASC Hamilton Centre"

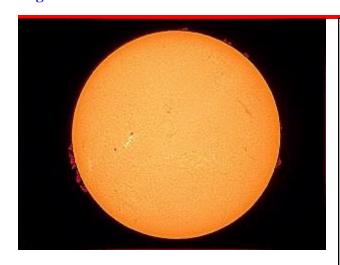
Item	Style No.	Price
Ladies North End Fleece	ASH70086	\$39.00
Vest		
Denim Shirt Long Sleeve	WD7120	\$36.00
Sweat Top "Heavy Cotton"	WD18430-D	\$30.00
Men's Micro Plus Lined	ASH88001	\$53.00
Wind shirt		
High Point Golf Shirt	WD5600-01	\$34.00
Men's Extreme Cotton Long	ASH85017	\$33.00
Sleeve Pique Golf Shirt		
Ladies Extreme Fashion Cut	ASH75008	\$27.00
Pique Golf Shirt		
Men's North End Fleece	ASH88005	\$49.00
Vest		
Elements Polyester Fleece	ASH441006	\$16.00
Toque		
Elements Polyester Fleece	ASH441007	\$16.00
Headband		
Gildan Long Sleeve T-Shirt	WD2400	\$23.00

Astronomy Day





This shot of Saturn was taken by Glenn Kukkola. Taken December 27 at 1:30 am. It is 60 stacked images taken with a Fuji Finepix 40i digital camera, a homemade adapter, through his equatorial mounted 8 inch f/5 Newtonian. Stacking and processing was done with Registax.



Gary Colwell produced this Photo.

We finally had a nice clear day. I set up my TV102 and my Solarmax 40 to check out the sun. Spaceweather.com said there was a good possibility of class M solar flares near sunspot 528. At 2:00 EST I set the scope up, there were lots of prominences. I went inside to let scope cool down, and at 2:30 WOW!!!!!! A massive flare appeared and lasted for about 20 minutes then disappeared! It should spark some nice auroras in the next few days depending on its strength. I thought you might like to see it. The picture is reduced in clarity for the web but the original is saved as a TIF file.

The picture was taken with 24mm Televue zoom 1/8 sec exposure with Nikon Coolpix 995 f 4.3 and processed in Registax and Photoshop 6.



Grant Maguire took this photograph at the RASC Observatory. When taking the picture the sky appeared mostly black, with small patches of red. However the film and the time exposure did a great job to show the effect the massive solar activity taking place.

January is the month for viewing Saturn

Don't forget to get your telescope out this month for viewing Saturn. Saturn is the second largest planet in the Solar System and the sixth planet away from the Sun. Saturn is characterized by the Saturn ring, which is composed of icy and rocky particles.

Saturn revolves around the Sun with a period of about 29.5 years. Opposition of Saturn will occur about once every 378 days. The last Saturn opposition occurred on 18 December 2002 and the next occurrence will be on 1 January 2004.

As Saturn has just passed the perihelion of its orbit in July 2003, it is still relatively close to the Sun. During the opposition on January 1, 2004, Saturn will be relatively bright, reaching a visual magnitude of about -0.3 to -0.5*. This will be a good time to observe Saturn and its ring structure. A telescope with 30 times or above magnification is preferred in observing Saturn.

NASA's Mars Exploration Rover Mission web site

If you are interested in keeping up to date on the Mars Exploration Rover mission, go to this website http://marsrovers.jpl.nasa.gov/home/index.html . January 4, 2004 saw the historic and successful landing of the first Mars lander "Spirit", and the subsequent lander "Opportunity". This website provide stunning photographs, press releases, and mission information.

January 2004 Toronto, Ontario

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1 Twi A: 6:07am Sun Rise: 7:50am Sun Set: 4:51pm Twi A: 6:34pm Moon Rise: 1:05pm Moon Set: 2:15am	2 Twi A: 6:07am Sun Rise: 7:51am Sun Set: 4:51pm Twi A: 6:35pm Moon Rise: 1:27pm Moon Set: 3:18am	3 Twi A: 6:07am Sun Rise: 7:51am Sun Set: 4:52pm Twi A: 6:36pm Moon Rise: 1:54pm Moon Set: 4:21am
4 Twi A: 6:08am Sun Rise: 7:51am Sun Set: 4:53pm Twi A: 6:36pm Moon Rise: 2:25pm Moon Set: 5:24am	5 Twi A: 6:08am Sun Rise: 7:51am Sun Set: 4:54pm Twi A: 6:37pm Moon Rise: 3:04pm Moon Set: 6:26am	6 Twi A: 6:08am Sun Rise: 7:51am Sun Set: 4:55pm Twi A: 6:38pm Moon Rise: 3:52pm Moon Set: 7:24am	7 Twi A: 6:08am Sun Rise: 7:50am Sun Set: 4:56pm Twi A: 6:39pm Moon Rise: 4:48pm Moon Set: 8:15am Full Moon: 10:41am	8 Twi A: 6:08am Sun Rise: 7:50am Sun Set: 4:57pm Twi A: 6:40pm Moon Rise: 5:50pm Moon Set: 8:59am	9 Twi A: 6:08am Sun Rise: 7:50am Sun Set: 4:58pm Twi A: 6:41pm Moon Rise: 6:57pm Moon Set: 9:35am	Twi A: 6:07am Sun Rise: 7:50am Sun Set: 4:59pm Twi A: 6:42pm Moon Rise: 8:06pm Moon Set: 10:04am
Twi A: 6:07am Sun Rise: 7:50am Sun Set: 5:00pm Twi A: 6:43pm Moon Rise: 9:15pm Moon Set: 10:29am	Twi A: 6:44pm Moon Rise: 10:25pm	13 Twi A: 6:07am Sun Rise: 7:49am Sun Set: 5:03pm Twi A: 6:45pm Moon Rise: 11:35pm Moon Set: 11:13am	14 Twi A: 6:07am Sun Rise: 7:48am Sun Set: 5:04pm Twi A: 6:46pm Moon Rise: none Moon Set: 11:34am Last Qtr: 11:46pm	15 Twi A: 6:06am Sun Rise: 7:48am Sun Set: 5:05pm Twi A: 6:47pm Moon Rise: 12:48am Moon Set: 11:57am	Twi A: 6:06am Sun Rise: 7:48am Sun Set: 5:06pm Twi A: 6:48pm Moon Rise: 2:03am Moon Set: 12:23pm	17 Twi A: 6:06am Sun Rise: 7:47am Sun Set: 5:07pm Twi A: 6:49pm Moon Rise: 3:22am Moon Set: 12:56pm
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25 Twi A: 6:02am Sun Rise: 7:42am Sun Set: 5:18pm Twi A: 6:57pm Moon Rise: 10:08am Moon Set: 9:51pm	26 Twi A: 6:01am Sun Rise: 7:41am Sun Set: 5:19pm Twi A: 6:59pm Moon Rise: 10:28am Moon Set: 10:58pm	27 Twi A: 6:00am Sun Rise: 7:40am Sun Set: 5:20pm Twi A: 7:00pm Moon Rise: 10:48am Moon Set: none	28 Twi A: 6:00am Sun Rise: 7:39am Sun Set: 5:22pm Twi A: 7:01pm Moon Rise: 11:08am Moon Set: 12:02am	29 Twi A: 5:59am Sun Rise: 7:38am Sun Set: 5:23pm Twi A: 7:02pm Moon Rise: 11:29am Moon Set: 1:06am Eirst Oft: 1:04am	30 Twi A: 5:58am Sun Rise: 7:37am Sun Set: 5:24pm Twi A: 7:03pm Moon Rise: 11:54am Moon Set: 2:10am	31 Twi A: 5:57am Sun Rise: 7:36am Sun Set: 5:26pm Twi A: 7:04pm Moon Rise: 12:24pm Moon Set: 3:13am

Board of Directors

Name	Position	Phone	
Les Nagy	Public Ed	905-388-1011	
Steve Barnes	President	905-631-9944 wk 905-336-2211 hm	
Gary Colwell Observing Director		905-277-4297	
Mark Kaye Past President		416-885-6134	
Roger Hill	Recorder	(905)878-5185	
Tina Coppolino		905 544 1747	
Ken Lemke	Membership	905-639-5127 hm 905-634-5168 wk	
John Williamson	Treasurer		
Grant Maguire	Orbit Editor	905 639 8926	
Colin Haig	Secretary	905 878 4334	
Scott Barrie	Web Master	905-854-1515	
Rob Bodner	Librarian	905-847-1688	