

STARFEST 2007

August 9 – 13, 2007

The **North York Astronomical Association** invites you to attend its twenty-sixth annual Starfest. Starfest is Canada's largest annual observing convention and star party. It attracts over eight hundred astronomy enthusiasts from Ontario, and neighbouring provinces and states. It has been ranked among the top seven star parties in North America by *Sky & Telescope* magazine. Starfest offers a wide variety of observing-oriented activities that address the needs and interests of experienced observers and astrophotographers, as well as those new to the hobby. Activities include observing sessions, formal and informal presentations, workshops, commercial exhibits, and a children's program. You are invited to bring your telescope and astronomical images, and share your observing experiences with others.

MONDAY, AUGUST 6 – TUESDAY, AUGUST 7		
	Campground Open	
10:00 p.m.	Observing Session Begins	
WEDNESDAY, AUGUST 8		
1:00 p.m.	Registration Opens	
		Small Tent
7:00 p.m.		Bruce County Astronomical Society Meeting - featuring, The Mercury Transit as Seen From Kitt Peak - Malcolm Park, everyone is welcome
10:00 p.m.	Observing Session Begins	
12:00 a.m.	Registration and Gate Close	
THURSDAY AUGUST 9		
9:00 a.m.	Registration Opens	
	Main Tent	Small Tent
10:00 a.m.	Capturing The Motion Astro-Imaging Workshop (\$20) - Andreas Gada	
1:00 p.m.	LUNCH	
2:00 p.m.	Digital SLR Image Processing Workshop (\$20) - Scott Ireland	
Evening Activities		
7:30 p.m.	Catch Some Rays - Catherine McWatters	
8:30 p.m.	Astro-Rap	
10:00 p.m.	Observing Session Begins, Registration Closes	
12:00 a.m.	Gate Closes	
FRIDAY AUGUST 10		
9:00 a.m.	Registration Opens	
Morning Activities		
	Main Tent	Small Tent
10:00 a.m.	Good Times for Gearheads: the Current State of Equipment in Amateur Astronomy - Tom Trusock	Telescope Fundamentals Workshop - Bruce Engels, Marc Fitkin, Efstonscience
11:00 a.m.	Understanding White Light and Narrowband Monochromatic Solar Filters, - Applications, Instrumentation and Observational Techniques for Solar Astronomers - John Hicks	GOTO German Equatorial Mounts: Versatility and Performance - Brady Johnson, KW Telescopes
12:00 p.m.	LUNCH	
		Commercial Exhibits Open
Afternoon Activities		

1:30 p.m.	Dark Matter and Other Great Mysteries of 21st Century Astronomy - Bob Berman	The SkyShed POD - Wayne Parker
2:30 p.m.	Giving Up the Ghost - Searching for Light Echoes from Historical Supernovae in the Milky Way - Doug Welch	Eyepiece Selection Workshop - Steve Barnes, Sky Optics
2:30 p.m.	"Sunspot" Solar Observing Session - Next to Baseball Field	
3:30 p.m.	Southern Ontario Meteor Network - Peter Brown	Is CCD Imaging for You? - Paul Markov
4:30 p.m.	Kepler: A NASA Mission To Find Earth-like Planets Orbiting Other Stars - John Caldwell	Polar Alignment Workshop - Doug George, Diffraction Limited
Evening Activities		
7:00 p.m.		Commercial Exhibits Close Friday Night at the Movies
7:30 p.m.	To Infinity and Beyond - Brian Lula	
10:00 p.m.	The Sky Tour Observing Session - or - Celestrivia if it is overcast	Red Light Café Opens
12:00 a.m.	Registration and Gate Close	
SATURDAY, AUGUST 11		
9:00 a.m.	Gate and Registration Open	
Morning Activities		
	Main Tent	Small Tent
10:00 a.m.	The Moon's Wildest Year - Bob Berman	Kidfest* - Round, Round We Go -- Join Diane and Brian (ages 3 – 6) - Diane and Brian O'Rourke
10:30 a.m.		Kidfest* - Merry Go Round – Is our galaxy spinning out of control? (ages 7 – 9) - Ken Davy.
11:00 a.m.	New Worlds in the Making: Origins of Planets and Brown Dwarfs - Ray Jayawardhana	Kidfest* - REDSHIFT (ages 9 +) - Alexi Manis, Dave Mott
12:00 p.m.	LUNCH	Commercial Exhibits Open Swap Table Opens - East of Red Light Café
Afternoon Activities		
1:30 p.m.	McNaught: The 'Tail' of a Great Comet Panel Discussion - Terrence Dickinson - John Drummond	
3:00 p.m.		The Music of the Night - Ron Ravneberg
5:00 p.m.	DINNER	Commercial Exhibits Close
Evening Activities		
7:00 p.m.	Door Prize Draws Announcements	
8:00 p.m.	Living in a Dynamic Universe - John Dubinski	
10:00 p.m.	The Sky Tour Observing Session Begins Perseid Meteor Watch	Red Light Café Opens
12:00 a.m.	Registration and Gate Close	
Sunday, AUGUST 12		
10:00 p.m.	Observing Session and Perseid Meteor Watch Begins	

* Parent or Guardian attendance mandatory up to the age of 9 and recommended for age 10 and above.

PRESENTATIONS AND WORKSHOPS

"The Universe In Motion" is the theme for this year's conference. Using this theme we will explore how motion, "the universal constant", and our understanding of it, has shaped our view of the universe.

Starfest 2007 features over twenty presentations and workshops, given by leading professional and amateur astronomers. This year's stellar line up includes: Bob Berman, Peter Brown, Terrence Dickinson, John Dubinski, Ray Jayawardhana, Brian Lula, Scott Ireland, Doug Welch and many more.

KEYNOTE SPEAKERS

Bob Berman, "Dark Matter and Other Great Mysteries of 21st Century Astronomy", Main Tent, Friday 1:30 p.m., **"The Moon's Wildest Year"**, Main Tent, Saturday 10:00 a.m. is the most widely read astronomer in the world. His celebrated *Strange Universe* feature appears monthly in *Astronomy* magazine, the largest circulation periodical on the subject. Berman is also astronomy editor, and astronomy writer, of the *Old Farmers Almanac*. He has authored more than a thousand published articles that have appeared in magazines and newspapers ranging from the *New York Times* syndicate to *Hudson Valley Magazine*, and was *Discover Magazine's* monthly columnist from 1989 until its sale in 2006.

Bob has authored several books on astronomy, "*Secrets of the Night Sky*", "*Cosmic Adventure*" and "*Shooting for the Moon*". Listeners in seven states hear his radio program "Skywindow" and he has made guest appearances on national television in numerous shows, including CBS This Morning, the Today show, and Late Night with David Letterman.

Berman founded the Catskill Astronomical Society in 1976, and is director of Overlook Observatory, near Woodstock, New York, and the Storm King Observatory at Cornwall, New York.

Bob has been "Eclipse Astronomer" lecturing for groups for six total eclipses, and the aurora expert leading tour groups to central Alaska from 2001 - 2003. His travels have taken him from the Arctic to the Antarctic

"Dark Matter and Other Great Mysteries of 21st Century Astronomy", is an illustrated look at the mind-twisters of our time. These are the great questions which historically have been at least as fascinating as the subsequent answers. Among the mind-twisting topics: Dark energy, String Theory, Solar Oddities, Gravity, and the Truth Behind Black Holes.

"The Moon's Wildest Year" Think the moon is out of fashion? Consider: Its orbit constantly changes its orientation, and this year concludes its most extreme angles, when the moon will be higher and lower in our sky than anytime until 2024. Here is everything you never knew about the moon's motion through the sky, the moon's appearance (e.g. when full, the moon is just bright enough to stimulate our retina's color mechanism, the photopic vision of cone cells, but primarily in the green part of the spectrum: This explains why the world looks green-blue by moonlight). Also little-known tips on observing lunar features.

Terrence Dickinson, "McNaught: The 'Tail' of a Great Comet Panel Discussion", Main Tent, Saturday 1:30 p.m., is the author of 15 astronomy books and is currently editor of the Canadian magazine, *SkyNews*. Among his numerous awards are: the Order of Canada, an honorary doctorate degree from Trent University, Peterborough, Ontario, and the Astronomical Society of the Pacific's Klumpke-Roberts award for outstanding contributions to public understanding of astronomy.

From his vantage point as editor of *SkyNews* Terrence was a focal point for observations made by Canadians of the passage of Comet McNaught, the comet that will go down in history as the "great comet of this century". What did he and other northern hemisphere observers see and experience? In this panel discussion we engage astronomers from both sides of the globe (and equator) to re-live the excitement of this comet and the legacy it has left behind.

John Dubinski, "Living in a Dynamic Universe", Main Tent, Saturday 8:00 p.m., has been a student of astronomy for almost one Saturnian year beginning as an enthusiastic amateur observer as a teenager to his current position in theoretical astrophysics at the University of Toronto. He is an expert in the application of N-body methods to the study of galaxy formation and dynamics and is a pioneer in the development of N-body algorithms on parallel supercomputers that have in recent times permitted simulations of galaxies and the large-scale structure using models containing billions of particles. During the past decade, he has developed new skills in computer graphics that have permitted the creation of animations of galaxies at extreme levels of numerical resolution. Recent collaboration with John Kameel Farah in the GRAVITAS project has led to new interests in the artistic exploration of gravitational phenomena.

Every planet, every star and every galaxy is in a constant state of motion - oscillating, spinning or simply moving through space. The daily cycles of night and day and the motions of the planets through the fixed stars were like mathematical puzzles to the ancient astronomers. Deep thinking about their solution over thousands of years inspired the development of modern science. These specific

problems were finally solved in recent centuries with the development of Newton's laws of motion and gravity. These same fundamental principles (with some modifications by Einstein) are believed to govern the motion of not only the planets in our solar system but everything we can observe on all scales from groups of stars, to galaxies, to clusters of galaxies to the entire universe. The timeframe for the evolution of these grand scales is so long that during our lifetimes that we can only perceive a frozen snapshot of the objects in the universe. As we enter the early 21st century, new supercomputer technology is allowing astronomers to simulate the galaxies and their complex dynamical histories with ever increasing realism. The slow evolution of galaxies over billions of years can be witnessed at last through the power of supercomputer simulation and animation. John will present some work from the GRAVITAS project - a synthesis of computer animation and music - that illustrates the beautiful and complex manifestations of gravity in the universe.

Ray Jayawardhana, "New Worlds in the Making: Origins of Planets and Brown Dwarfs", Main Tent, Saturday 11:00 a.m., is an associate professor of astronomy & astrophysics at the University of Toronto and an internationally known science writer. Born and raised in Sri Lanka, he holds a bachelor's degree from Yale and a Ph.D. from Harvard. He uses some of the world's largest telescopes - including VLT, Subaru, Keck, Gemini and Magellan - to explore the origin and diversity of planetary systems as well as the formation of stars and brown dwarfs. He is the co-author of over 50 scientific papers. His research findings have been featured in a wide variety of print and broadcast media around the world. Ray has received the Early Researcher Award from the Government of Ontario and the Vainu Bappu Gold Medal from the Astronomical Society of India.

Ray serves as a contributing editor to *Astronomy* magazine. His popular articles have also appeared in a variety of other publications including *The Economist*, *Science*, *New Scientist*, *Scientific American*, *Muse*, *Sky & Telescope*, and *Times Higher Education Supplement*. He is the recipient of the 2003 Science Writing Award for a Scientist from the American Institute of Physics, and author of "*Star Factories: The Birth of Stars and Planets*".

Astronomers have detected over 200 planets around Sun-like stars, as well as hundreds of "brown dwarfs" too puny to light up as stars. Intriguingly, some brown dwarfs may also harbor planetary companions. Remarkable new observations and sophisticated theoretical calculations are making it possible for us to decipher the birth and early evolution of planets and brown dwarfs.

Brian Lula, "To Infinity and Beyond", Main Tent, Friday 7:30 p.m., is the President of Polytec PI Inc, the world leader in PZT based nanopositioning systems for aerospace, semiconductor, astronomy (secondary positioners and high speed tip tilt positioners for adaptive optic systems) and data storage test applications. To an ATM, it's like working in a candy store! Brian has been involved in amateur telescope making for over 35 years, starting as a kid with a simple two lens Galilean design with optics scrounged from a garbage can, and then working his way up to a 20" computer controlled f/4 Newtonian astrograph optimized for wide field (24 x 36 arc minute), high resolution (0.75 arc sec/pixel) deep sky CCD imaging.

Brian is an expert astro-imager whose images have been featured in *Sky & Telescope*, *Astronomy* and numerous international astronomy and technical magazines. His deep sky images have been used twice as NASA's Astrophoto of the Day.

Brian will talk about his adventures of CCD imaging at the edge, from telescope and observatory design to construction, and then actual remote imaging.

OTHER SPEAKERS

Peter Brown, "Southern Ontario Meteor Network", Main Tent, Friday 3:30 p.m., is an Associate Professor, Canada Research Chair, and Director – Western Planetary Science Program at the Department of Physics and Astronomy at the University of Western Ontario. He specializes in the study of small solar system bodies, including all aspects of meteors and meteoroids, radar measurements of meteors, the physical properties of asteroids (spectra, rotation rates), meteorites and large bodies interacting with Earth's atmosphere and infrasonic and seismic detection of bolide airbursts.

Although space is considered a vacuum there are still zillions of small bodies hurtling through it. Sometimes these bodies collide with the earth's atmosphere producing meteors, and if they are large enough to survive their journey through the atmosphere they will impact the earth, producing a meteorite.

Peter has played an instrumental role in the establishment of the Southern Ontario Meteor Network. This network is designed to detect and record the path of bright meteors as they enter the earth's atmosphere. Using this information the trajectory and location of impact can be determined. Peter will describe this network, how it works and results to date.

At the far end of the spectrum Peter has been using radar to detect meteors and will describe how it works, and the new meteor shower catalogue that is being produced.

Peter will conclude his presentation by reviewing the predictions for the Perseid meteor shower, which peaks during Starfest.

John Caldwell, “Kepler: A NASA Mission To Find Earth-like Planets Orbiting Other Stars”, Main Tent, Friday 4:30 p.m., is a professor at York University and a member of the Kepler Science Working Group, which oversees the scientific program of the Kepler mission. He has determined the number density of faint background stars, which could cause confusion with the search for planets orbiting nearby stars. Previously he worked in the same capacity for the development of the Hubble Space Telescope using HST observations to determine the stellar background situation.

The total number of extra-solar planets now known to be orbiting other planets is around 200, with more being discovered on a regular basis. Essentially, all of the discoveries have been giant planets similar to Jupiter, many of them much bigger. There are many important differences between our System and the extra-solar ones found so far. Kepler will perform a census of the terrestrial planets in a nearby region of the Galaxy known as the Orion Arm. Part of Kepler's mission is to determine whether or not the terrestrial planets are properly placed in their orbits to have a climate favourable to the existence of life.

John Drummond, “McNaught: The ‘Tail’ of a Great Comet Panel Discussion”, Main Tent, Saturday 1:30 p.m., has been obsessed with the stars ever since his mother pointed the 'Pot' in Orion out to him when he was 12. He also began to develop an interest in photography about the same time and later combined the two to become an amateur astrophotographer. His other astronomical passions are comet and meteor observing. John is currently the director of two Royal Astronomical Society of New Zealand sections: the Comet and Meteor section, and the Astrophotography section. He is also a councillor of the RASNZ. John is a Contributing Photographer for the Australian *Sky & Telescope* magazine. He is the president of the local astronomical society (the Gisborne Astronomical Society) and is fairly frequently asked to speak throughout New Zealand. He lives on a small farm with a dark sky 10 miles to the west of Gisborne, New Zealand and is imaging and observing on most clear nights.

From this vantage point John had a ring side seat for the passage of Comet McNaught, the comet that will go down in history as the “great comet of this century”. What did he and other southern hemisphere observers see and experience? John will be joining us via teleconference in this panel discussion as we engage astronomers from both sides of the globe (and equator) to re-live the excitement of this comet and the legacy it has left behind.

John Hicks, “Understanding White Light and Narrowband Monochromatic Solar Filters, - Applications, Instrumentation and Observational Techniques for Solar Astronomers”, Main Tent, Friday 11:00 a.m., is a senior landscape architect specializing in site planning for Provincial Parks. John has studied and photographed the solar disk for 25 years, building his high-wall domed observatory for strictly solar use.

Surveys conducted by *Sky & Telescope* show that about 90% of amateur astronomers observe or photograph the Moon regularly, yet barely a third examine the Sun which can display as much detail as the lunar surface. Additionally, the solar surface changes daily, which at the very least spurs investigation. The Sun has many of the same atmospheric limitations along with a few more serious daytime physical affects, which inhibit good observing and photography. Both white light and narrowband monochromatic filters require optimum weather conditions to obtain crisp, high contrast images. A list of solar photographic tips will be discussed along with illustrations of various optical arrangements in both white light and monochromatic light. The form and function of the components within the most popular filters available will be illustrated through cross-sectional diagrams. The performance of most filters varies directly with their price but good results are often obtained with a little experimentation, and the use of digital processing programs has achieved image refinement far beyond imagination. Today's solar astronomer can easily compete with professional images taken of the entire disk. Some digital processing procedures will be exhibited to capture good narrowband images.

Paul Markov, “Is CCD Imaging for You?”, Small Tent, Friday 3:30 p.m., is a senior program manager at ATI Technologies Inc., and in his spare time is the webmaster for Canada-wide *Astronomy Buy & Sell* (www.astrobuysell.com). This year Paul is celebrating 25 years of visual deep sky observing, however, he recently took the plunge into CCD imaging and has had no regrets. If you are very new to CCD imaging or are unsure whether to even get involved in CCD imaging, this presentation is for you. Imaging can be very intimidating, but it is possible to obtain nice images with a simple set up and without making a huge time and money commitment. In this presentation you will see simple images taken with a Meade DSI Pro and a 10-inch LX200 telescope from a light polluted backyard that should please most first-time imagers.

Paul will discuss basic equipment requirements, how to set up and prepare for an imaging session, and difficulties you may experience. Then he will describe many of his imaging sessions and discuss common hurdles such as focusing, vignetting, dust on the optics, poor tracking, and dark frames. Because image processing is such an important part of the end result, some basic image processing steps will be suggested.

Catherine McWatters, “Catch Some Rays”, Main Tent, Thursday 7:30 p.m., has been a freelance astronomy educator for more than three decades. When not teaching in a planetarium she enjoys the challenges of a light polluted city sky with her 13.1" telescope.

Cathy will present the historical detection of Cosmic Rays, along with current information about their origin. During this presentation participants will build Cosmic Ray detectors to "catch some rays". Please bring a small white light flashlight, all other materials will be provided.

Ron Ravneberg, "The Music of the Night", Small Tent, Saturday 3:00 p.m., is an amateur astronomer, telescope maker and long-time member of the Columbus (Ohio) Astronomical Society. An amateur astronomer since the 1950s, he is a Past President of both the Seattle and Columbus astronomical societies. While he can't spell CCD, he does know into which end of the telescope you look, and spends his astro-time enjoying the quiet pleasures of the night sky.

Ron's presentation will be a relaxed exploration of "*The Music of the Night*," in which he will describe the path his observing has taken since he located a small hand-held Newtonian reflector at a star party flea market. In the process of rebuilding and using the instrument he ended up rediscovering the quiet beauty of the night sky and the feelings that got him interested in amateur astronomy in the first place.

Tom Trusock, "Good Times for Gearheads: the Current State of Equipment in Amateur Astronomy", Main Tent, Friday 10:00 a.m., Tom Trusock is the head gear hound and administrator of the CloudyNights.com forums. He's a long time amateur who observes from Michigan's dark skies.

Doug Welch, "Giving Up the Ghost - Searching for Light Echoes from Historical Supernovae in the Milky Way", Main Tent, Friday 2:30 p.m., is a Professor in the Department of Physics and Astronomy at McMaster University in Hamilton, Ontario, Canada. He is currently the Chair of the Board of Directors for the Gemini Observatory. Whenever possible, he spends time out under the night sky with like-minded friends.

We recently discovered light echoes from centuries-old supernovae in the Large Magellanic Cloud. Since then, we have found many instances of these features which allow us to study the outburst light from such supernovae using modern instruments. Supernovae light echoes from historical events in the Milky Way move rapidly - roughly 30 arcsec/year - making the detection of the brightest (and therefore most interesting ones) suitable for amateur CCD difference imaging. Doug will describe what we know to date and the exciting opportunities in this new field.

FEATURED MANUFACTURERS

Doug George, Diffraction Limited, "Polar Alignment Workshop", Doug George, Small Tent, Friday 4:30 p.m., is President of Diffraction Limited, an Ottawa-based company that produces astronomical imaging products including MaxIm DL, MaxDSLRL and MaxPoint. In addition to enjoying astrophotography and observing occultations, Doug enjoys participating in patrol programs. He has co-discovered one comet visually, and co-discovered 12 supernovae as a member of the Puckett Observatory Supernova Search team.

Trailed stars are the bane of astrophotographers everywhere - and a poor polar alignment is the most common cause. In this workshop we learn the basics of polar alignment, how much accuracy is needed, and how to get aligned quickly and accurately. Some of the techniques that will be covered are: bore site alignment, setting circle method, drift alignment, the Boltwood method and software pointing model method using MaxPoint.

Wayne Parker, SkyShed Observatories, "The SkyShed POD", Small Tent, Friday 1:30 p.m., is a Five-time Juno Award Winning, and Grammy Nominated Musician. Wayne has spent his life pursuing two main passions: Music with his rock group, Glass Tiger, and Astronomy with his observatory company, "SkyShed Observatories".

In 2003, Wayne debuted a new kind of roll off observatory at Starfest. Since then, SkyShed Roll Off has sold over 3000 Plans, Kits, and Installations worldwide.

This year Wayne is debuting a revolutionary domed observatory called SkyShed POD ((Personal Observatory Dome). POD went on sale in April and is already a hit in North America, Europe, and Oceania.

Wayne will be discussing the story behind the development of SkyShed POD, and the next step in the SkyShed project, the creation of a worldwide online network that will unite and excite astronomers like never before.

There will be a number of SkyShed PODs on site at Starfest 2007. Complete product details are available at www.skyshedpod.com.

FEATURED RETAILERS

Stephen Barnes, Sky Optics, "Eyepiece Section Workshop", Small Tent, Friday 2:30 p.m., has been an amateur astronomer since childhood. He has turned his love of astronomy into a vocation and in 1996 opened Sky Optics, a retail telescope store in Burlington, Ontario. Steve is also an award winning astrophotographer.

Eyepieces are an essential component of every telescope, matching them to the scope and type of objects to be observed is important to achieve optimum performance. In this workshop Steve will cover the factors to be considered in choosing eyepieces for your collection from different eyepiece designs to choosing focal lengths and designs that best suit your telescope.

Bruce Engels and Marc Fitkin, Efstonscience, "Telescope Fundamentals Workshop", Small Tent, Friday 10:00 a.m., are avid amateur astronomers who have more than 35 years of experience between them. Bruce and Marc are Astronomy Representatives at Efstonscience.

Purchasing a telescope can be an extremely confusing and frustrating experience unless you know what your astronomical interests are, and what type of telescope and mounting best supports those interests. In this workshop Bruce and Mike will describe the various types of telescopes and mountings commercially available today, and their suitability to a variety of different observing and astrophotographic endeavors. Common jargon and fundamental concepts such as light grasp, magnification and field of view will be explained. They will then offer some practical advice on how to determine what telescope is best for you and answer any questions you may have.

Brady Johnson, KW Telescope and Nature, "GOTO German Equatorial Mounts: Versatility and Performance", Small Tent, Friday 11:00 a.m., owns and operates KW Telescope and Nature in Kitchener-Waterloo, Ontario. He is an avid astrophotographer and active member of the KW Centre of the Royal Astronomical Society of Canada, including two years as President.

The versatile German Equatorial Mount (GEM) is available from several manufacturers with GOTO electronics. This talk covers the basic operation of the GEM and features of the GOTO electronics relevant to both observational astronomers and astrophotographers, including a section on autoguiding. The popular EQ6 Pro and HEQ5 Pro mounts from SkyWatcher Telescope Corp. will be discussed in some detail.

IN-DEPTH HANDS-ON WORKSHOPS

Two in-depth, hands-on workshops will be conducted on Thursday. Each workshop will be three hours in length and limited to 40 people each. Since laptop computers will be required for most workshops, please read the workshop descriptions carefully to determine if you meet the prerequisites for the workshop. If you wish to participate in a workshop, you must register and pay a \$20 workshop fee for each workshop, **in advance**.

Andreas Gada, "Capturing The Motion Astro-Imaging Workshop", Main Tent, Thursday 10:00 a.m. – 1:00 p.m., has been involved in astronomy since his teens. He is one of the founders and a Past President of the North York Astronomical Association and in 1982 started Starfest. When not working on Starfest he enjoys doing astrophotography and puttering in the "dungeon", machining telescope parts.

Digital SLR cameras have revolutionized astrophotography. The compact nature of these cameras combined with their large sensors, built-in noise reduction, wide exposure range and ability to be used as both a stand-alone camera with conventional lenses, or as a computer-controlled camera attached to a telescope, make them ideally suited for many types of astrophotography. As a result one no longer needs specialized CCD cameras to image the night sky, the planets and other solar system objects.

In this workshop we explore how DSLR cameras, combined with relatively inexpensive software, can be used to create movies that capture the motion of the night sky and other solar system objects.

We begin with the basics by looking at what you need to capture the motion of the stars across the sky, using a camera mounted on a tripod with a minimum amount of equipment and image processing. We then attach the camera to the telescope to capture the motion of the moon through the Pleiades and look at what additional image capture/processing software this may entail. Once we are comfortable with this, we explore the challenge of imaging a total solar eclipse from just before first contact, when the first nibble is taken out of the sun, through totality, to just after fourth contact. We then use these images to create a time-lapse movie of the event.

This is a hands-on workshop and you will need to bring your laptop with you for the in-class exercises.

To participate in this workshop, ideally you will need to have a high-speed laptop (minimum 1.6 Megahertz), with one gig of RAM and a minimum of 50 Megs of free space on your hard drive. You should also have a working copy of Photoshop (any version), and windows Movie Maker. As part of the workshop you will be given a demo disk containing images that will be used for the hands-on

exercises as well as trial versions of ProShow Gold, Images Plus, and MaxDSLR.

Scott Ireland, “Digital SLR Image Processing Workshop”, Main Tent, Thursday 2:00 – 5:00 p.m., lives in South Florida and has been photographing nature and the heavens for over twenty-five years. His photographs have been published internationally in many books, textbooks and periodicals, and have appeared in various museum and gallery exhibits. He is the author of the recently published book, *Photoshop Astronomy*, and is a frequent lecturer on image processing topics.

This hands-on workshop will focus on how to process digital SLR astro images – taking darks, calibration, stacking (all using ImagePlus), then how to use DDP (Digital Development) and ultimately process the final image in Photoshop. It will take the images step-by-step through the entire image processing sequence. Materials will be handed out that include a course booklet and a CD-R containing example images. PARTICIPANTS ARE ENCOURAGED TO BRING THEIR LAPTOP COMPUTERS (WITH PHOTOSHOP INSTALLED OF COURSE!) TO WORK THROUGH THE EXAMPLES IN REAL TIME AS THE TECHNIQUES ARE PRESENTED.

BEGINNER’S ACTIVITIES

If you are new to the hobby and would like to learn more about how to observe or image the night sky, then these presentations or activities are for you: Telescope Fundamentals Workshop, GOTO German Equatorial Mounts: Versatility and Performance, Eyepiece Selection Workshop, Is CCD Imaging for You?, Polar Alignment Workshop, The Music of the Night, Good Times for Gearheads, “Sunspot” Solar Observing, and The Sky Tour.

OBSERVING SESSIONS

Bring your telescope and binoculars, and join us for our evening observing sessions.

THE SKY TOUR

If you feel like you are "lost in space" under the night sky, the Sky Tour may help you. Between 10:00 p.m. and midnight on Friday and Saturday, Ken Davy, Tony Ward, and other experienced observers will give a tour of the night sky, using various types of telescopes. The Sky Tour will be conducted in the field just west of the main tent.

“SUNSPOT” SOLAR OBSERVING SESSION

Join us for a solar viewing session on Friday 2:30 – 4:00 p.m. next to the Baseball Field. A variety of telescopes and filters will be used to observe the sun.

COMMERCIAL EXHIBITS

Astronomical dealers will be on hand to demonstrate and sell the latest from the world of astronomy. If there is something that you've been thinking of adding to your observing equipment and want to examine, or possibly test, under actual observing conditions, this is your golden opportunity. Commercial exhibits are located in the open field to the west of the main tent and along the roadway just north of the main tent.

SWAP TABLE

Participants will have the opportunity to buy, sell or trade astronomical articles on Saturday, 12:30 to 2:30 p.m. The swap tables will be located south of the Food Booth. These tables are not for commercial sales. Individuals will be responsible for their own property at the tables.

KIDFEST

KIDFEST is a special program for younger astronomers. The Kidfest Crew this year explores the Universe in Motion with our young astronomers. From 10:00 a.m. – 12:00 p.m. Saturday in the Small Tent there will be three presentations (10 - 15 minutes in length). We will look into the movement of astronomical bodies. As usual a craft will follow each of the presentations.

Kidfest Presentations

- 10:00 a.m. **Round, Round We Go** -- Join Diane and Brian for a lively discussion of the earth's movement: its orbit around the sun and its revolution on its axis; and how this motion creates our days, nights, and seasons of the year. [Recommended for the truly younger astronomers - ages 3-6.]
- 10:30 a.m. **Merry Go Round – Is our galaxy spinning out of control?** No it's not, but it is spinning. Learn all about the motion in our galaxy from Mercedes. [Recommended to astronomers age 7-9]

11:00 a.m. **REDSHIFT** – Alexi will talk about Relative Motion in the universe. Where is everyone going and how fast? A bit of the big bang and other theories that gets us moving in the morning. [Recommended for all astronomers age 9+]

Parent or Guardian attendance is mandatory up to the age of 9, and recommended for ages 10 and up.

ASTRO-RAP

On Thursday night, you are invited to join us in the Main Tent to talk about astrophotography and astronomy in general. Bring your images and share your experiences with others.

PERSEID METEOR WATCH

The Perseid meteor shower peaks on the night of Sunday August 12. To enable Starfest participants to observe the Perseids from a dark country sky we have extended Starfest by a day. While there are no planned activities during the day on Sunday, the park lights will be turned off at night.

FRIDAY NIGHT AT THE MOVIES

On Friday night at 7:00 p.m. a movie with an astronomical theme will be shown in the Small Tent.

CELESTRIVIA

If it's cloudy on Friday or Saturday night, the CELESTRIVIA challenge will be held in the Main Tent after the evening program. In this test of astronomical knowledge, teams will be competing for valuable prizes. To participate in this event make up a team of four people, give your team a name and be prepared to answer astronomical questions in the following categories: Constellation Lore, Famous Astronomers, Star Names, Solar System, Telescopes Big and Small, The Messier Objects, Astrophysics 101, Music of the Spheres, Identify the Photo and Grab Bag. The team with the most correct answers wins.

CONVENTION REGISTRATION

A registration fee of \$50.00 Cdn / \$47.00 US (individual rate) or \$80.00 Cdn / \$75.00 US (family rate) is charged to cover the expenses of the convention. Family registration is defined as two adults in a legally recognized relationship and their dependant children (age 12 and under). Dependent children ages 13 - 19 are an additional \$20.00 Cdn / \$19.00 US per child. Brothers, sisters, cousins, uncles, aunts, nieces, nephews, in-laws, or best friends (regardless of age) do not qualify for the family rate. You are urged to pre-register by mail before July 20, 2007. Please complete and return the attached registration form, with payment, to the address indicated. After July 20, 2007 and at the gate, the registration fee will be \$60.00 Cdn / \$56.00 US per person or \$90.00 Cdn / \$84.00 US per family and \$25.00 Cdn / 23.00 US per dependant child (age 13 – 19). Registration confirmations will be mailed, or emailed (if your email address is included on the registration form) to you, if payment is received prior to July 20, 2007.

DOOR PRIZE DRAW RULES

On Saturday night at 7:00 p.m. the door prize draw will be held in the Main Tent. Thousands of dollars of astronomical merchandise, provided by the astronomical retailers and manufactures participating in Starfest, will be given away. You must claim your prize at the time your name is drawn. If you are not present when your name is drawn, another name will be drawn until the prize is given away. Your name is automatically entered into the draw if you paid a registration fee as follows: One draw ticket per individual registration, two draw tickets for each family registration, and one draw ticket for each youth registration.

CAMPGROUND REGISTRATION

This is a camping weekend, so bring your tent or trailer. The River Place is a private campground with a pool, children's play area, and a few flush toilets and coin-operated showers. Please complete the camping section of the registration form and enclose payment. If you are not camping, but staying elsewhere, please complete only the entrance fee of the camping/entrance section of the registration form, as well as the Starfest convention registration.

ELECTRICAL HOOKUPS

Electrical Hookups, apart from trailer sites, are for astronomical equipment only and should not be used for electrical appliances such as portable coolers.

TRAILER SITES

A limited number of trailer sites are available by **advance reservation only**, on a first-come, first-serve basis. Please indicate the size of your trailer and your hookup requirements (water, sewer, electrical) on the registration form, as well as your phone or email address in case we need further details. Trailer sites will be assigned two weeks prior to Starfest based on the order in which registrations were received. You will be notified of your site assignment at this time. Please note that some trailer sites are obstructed by trees. If you feel your assigned site is not suitable you will be given two options:

- 1) set up your trailer in the general camping area (without hook ups) at a reduced cost
- 2) leave, with our apologies and a full refund.

MEALS

A buffet style dinner will be served in the Main Tent on Saturday evening. The buffet offers roast beef, roast chicken and dressing, seafood Newburg, mini red potatoes, vegetable medley, two salads, assorted breads, various deserts, coffee, tea and soft drinks. To reserve your dinner, please indicate on the registration form the number required, and enclose payment. We cannot guarantee a dinner unless you reserve one in advance.

During the day, the Red Light Café provides breakfast, light meals and snacks on a pay-as-you-go basis. Menu items include Hamburgers, Cheeseburgers, Chickenburgers, Hot Dogs, Sausage on a Bun, French Fries, Onion Rings, Cheeseballs, Perogies, Fish & Chips, Shrimp & Chips, Chicken Fingers & Chips, BBQ Beef & Fries, Butter Tart Squares, Belgian Waffles, Muffins, Ice Cream Bars and Drumsticks, Soft Drinks, Juices, Milk, Chocolate Milk, Coffee and Tea. The breakfast menu includes – Scrambled Eggs, Sausages, Home Fries, Waffles, Breads, Juices and Coffee. The Café is open late on Friday and Saturday nights and provides coffee and doughnuts, etc. and a chance to sit and chat with friends.

Cooking is allowed in the camping area on campstoves and charcoal grills. Open fires are not permitted. Restaurants are located in Ayton, Mount Forest, Durham, and Hanover, within a 1/2-hour drive of The River Place.

Because of the large number of people attending Starfest, picnic tables are in short supply. We suggest you bring your own folding table and chairs.

STARFEST MERCHANDISE

A limited quantity of Starfest T-shirts, Sweatshirts, baseball caps, toques and pins will be available. To avoid disappointment, order your promotional items with your pre-registration.

GET INTO THE CLUB

Astronomy is a community activity. The North York Astronomical Association is an organized group of amateur astronomers who enjoy observing, astrophotography and many other astronomy related activities. To satisfy the needs and interests of our members the club maintains two observing sites, and holds monthly meetings and observing sessions. Membership in the NYAA is open to all. Membership: \$40 individual, \$45 family. In addition, there is a \$20 site access fee which allows unlimited access to our two observing sites, one near Schomberg (approx. 45 mins. West of Toronto) and the other at Oak Heights (1 hour east of Toronto).

INTERNET REGISTRATION/CONFIRMATION

Our website and registration system have been upgraded to enable you to register over the Internet. Complete details and an online registration form are available on our website at <http://www.nyaa-starfest.com>. If you include your email address on the registration form you will receive electronic confirmation.

CREDIT CARDS

We accept VISA, MasterCard and AMEX. Please note all prices quoted are 'cash discounted'. A 4% administration fee will be added when payment is made via credit card.

PRIVACY POLICY

Protecting your privacy has always been a priority of the North York Astronomical Association. Please be assured that all information about you and your family is kept strictly confidential and is collected, used and only disclosed, where necessary, to facilitate your participation in Starfest.

REFUND POLICY

Cancellations will be refunded in full if notification is received by July 20, 2007.

If you cancel after July 20, 2007 or are a “No Show”, a partial refund will be issued 6 – 8 weeks after Starfest as follows: 1. Registration fee less a \$25 (or \$35 if you ordered promotional items) administration fee; 2. Dinner fee, if we were able to resell your dinner tickets; 3. Camping fee; 4. If you ordered Starfest Promotional items they will be mailed to you via parcel post.

If while at Starfest you decide to leave before the end of the conference and are out of the park **before** 2:00 p.m., the camping fee for that day and any unused days will be refunded at the registration desk when you leave.

STARFEST COORDINATES

Longitude: 80° 50' 27" W, Latitude: 44° 04' 28" N, Elevation: 400 metres.

STARFEST 2008

Starfest 2008 will be held August 7 – 10, 2008.

NYAA HOME PAGE

An electronic version of this brochure, and on-line registration is available on the Starfest website at: www.nyaa.ca

STARFEST 2007 - Canadian Advance Registration Form

To register, please complete this form and send it with your payment to: STARFEST, 26 Chryessa Ave, Toronto, Ontario, M6N 4T5. **Make cheques payable to STARFEST.** You can also register via the Internet. Complete details and a registration form are available at www.nyaa.ca. **Please note all prices are cash discounted.**

Name: _____

Address: _____

City: _____ Prov: _____ Postal Code: _____

Car License: _____ No. of People: _____ Phone/Email: _____
(included in this registration)

I will arrive on Mon ___ Tue ___ Wed ___ Thur ___ Fri ___ Sat ___

Both a Starfest Registration Fee and a Camping or Entrance Fee are charged for all participants.

STARFEST REGISTRATION FEE (see convention registration section for detailed explanation)

Individual Registration _____ at \$50.00* each \$ _____
-- OR -- Family Registration (mama, papa and children age 12 and under) _____ at \$80.00* each \$ _____
 Youth Registration (children age 13 – 19, when accompanied by their parents) _____ at \$20.00* each \$ _____

Names of Family members / others included in this registration: _____

Dinner Reservations - Adult _____ at \$24.00 each \$ _____
 - Child (12 & under) _____ at \$13.00 each \$ _____

THURSDAY IN-DEPTH WORKSHOP REGISTRATION

Capturing The Motion Astro-Imaging (10:00 – 1:00) _____ at \$20.00 each \$ _____
 Digital SLR Image Processing (2:00 – 5:00) _____ at \$20.00 each \$ _____

CAMPING OR ENTRANCE FEE

Please calculate camping -- OR -- entrance fee using applicable rate.

Individual Camping Rate	No. of People _____ x	No. of Nights _____ x	\$14.00 \$ _____
Family Camping Rate		- No. of Nights _____ x	\$20.00 \$ _____
Electrical Hookup for astronomical equipment**		- No. of Nights _____ x	\$2.00 \$ _____
Trailer Site with Full Hookup – (Length of Trailer _____)		- No. of Nights _____ x	\$24.00 \$ _____
-OR - Entrance Fee (Non-Campers)	No. of People _____ x	No. of Days _____ x	\$10.00 \$ _____

(NOTE: If you are camping overnight and staying past 2 p.m. the next day, you will owe a camping or entrance fee for the second day as well. E.g. if you arrive on Friday and stay until Saturday afternoon you owe camping or entrance fees for two days.)

Promotional Items

T-shirts: S ___ M ___ L ___ XL ___ @ \$19.00 ea = _____ + XXL ___ @ \$24.00 ea = _____ \$ _____
 Sweatshirts: S ___ M ___ L ___ XL ___ @ \$46.00 ea = _____ + XXL ___ @ \$49.00 ea = _____ \$ _____
 Baseball Caps _____ x \$16.00 \$ _____
 Toques: Black: ___ Navy: ___ Red: ___ Cream: ___ \$14.00 \$ _____
 Pins _____ x \$9.00 \$ _____

NYAA Membership

Individual: _____ @ \$40.00 Family : _____ @ \$45.00 Observing Site Access Fee: _____ @ \$20 \$ _____
 Sub Total \$ _____

Visa ___ MasterCard ___ AMEX ___ _____ Expiry Date _____

Signature: _____ Credit Card Administration Fee 4% of SubTotal \$ _____
 Total \$ _____

* **NOTE:** After July 20, 2007 and at the gate, the registration fee will be \$60.00 per adult, \$90.00 per family and \$25.00 per child age 13 - 19.

** A limited number available, in select areas, on a first come first serve basis. Please bring a long extension cord.

STARFEST 2007 - U.S. Advance Registration Form

To register, please complete this form, and send it with your payment in US currency to: STARFEST, 26 Chryessa Ave, Toronto, Ontario, M6N 4T5 Canada. **Make checks payable to STARFEST.** You can also register via the Internet. Complete details and a registration form are available at www.nyaa.ca Please note all prices are cash discounted.

Name: _____

Address: _____

City: _____ State: _____ Zip Code: _____

Car License: _____ No. of People: _____ Phone/Email: _____
(included in this registration)

I will arrive on: Mon ___ Tue ___ Wed ___ Thu ___ Fri ___ Sat ___

Both a Starfest Registration Fee and a Camping or Entrance Fee are charged for all participants.

STARFEST REGISTRATION FEE (see convention registration section for detailed explanation)

Individual Registration Fee _____ at \$47.00 US* each \$ _____
-- OR -- Family Registration (mama, papa and children age 12 and under) _____ at \$75.00 US* each \$ _____
Youth Registration (children age 13 – 19, when accompanied by their parents) _____ at \$19.00 US* each \$ _____

Names of Family members / others included in this registration: _____

Dinner Reservations - Adult _____ at \$22.00 US each \$ _____
- Child (12 & under) _____ at \$12.00 US each \$ _____

THURSDAY IN-DEPTH WORKSHOP REGISTRATION

Capturing The Motion Astro-Imaging (10:00 – 1:00) _____ at \$19.00 US each \$ _____
Digital SLR Image Processing (10:00 – 1:00) _____ at \$19.00 US each \$ _____

CAMPING OR ENTRANCE FEE

Please calculate camping -- OR -- entrance fee using applicable rate.

Individual Camping Rate No. of People ___ x No. of Nights ___ x \$13.00 US \$ _____
Family/Couple Camping Rate - No. of Nights ___ x \$19.00 US \$ _____
Electrical Hookup for Astronomical Equipment ** - No. of Nights ___ x \$2.00 US \$ _____
Trailer Site with Full Hookup – (Length of Trailer _____) - No. of Nights ___ x \$22.00 US \$ _____
- OR - Entrance Fee (Non Campers) No. of People ___ x No. of Days ___ x \$9.00 US \$ _____

(Note: If you are camping overnight and staying past 2 p.m. the next day, you will owe a camping or entrance fee for the second day as well. E.g. if you arrive on Friday and stay until Saturday afternoon you owe camping or entrance fees for two days.)

Promotional Items

T-shirts: S ___ M ___ L ___ XL ___ @ \$18.00 US ea = _____ + XXL ___ @ \$22.00 US ea = _____ \$ _____
Sweatshirts: S ___ M ___ L ___ XL ___ @ \$42.00 US ea = _____ + XXL ___ @ \$45.00 US ea = _____ \$ _____
Baseball Caps _____ x \$15.00 US \$ _____
Toques: Black: ___ Navy: ___ Red: ___ Cream: ___ _____ x \$13.00 US \$ _____
Pins _____ x \$8.00 US \$ _____

NYAA Membership

Individual: ___ @ \$37.00 US Family : ___ @ \$41.00 US Observing Site Access Fee: ___ @ \$18.00 US \$ _____
Sub Total \$ _____

Visa ___ MasterCard ___ AMEX ___ _____ Expiry Date _____

Signature: _____ Credit Card Administration Fee 4% of SubTotal \$ _____
Total \$ _____

* **NOTE:** After July 20, 2007 and at the gate the registration fee is \$56.00 US per individual or \$84.00 US per family and \$23.00 US per child age 13 - 19.
** A limited number available, in select areas, on a first come first serve basis. Please bring a long extension cord.

MOTELS and BED & BREAKFAST

Motel and Bed & Breakfast accommodations are available, within a thirty-minute drive of the River Place, in Mount Forest, Durham, Hanover, Palmerston and Walkerton. Rates and Email contact information are available on our website at www.nyaa-starfest.com. Please make your own reservations.

Motels

Forest Plaza Motel	284 Main St. N., Mount Forest, N0G 2L2	(519) 323-1101
Canadiana Motel	617 10th St., Hanover, N4N 1S1	(519) 364-1580
Travellers Inn	244 7th Ave. S., Hanover, N4N 2H1	(519) 364-1911
Varney Inn Motel	R.R. #3, Durham, N0G 1R0 (Hwy #6)	(519) 369-9982
Ranton Place Hotel	120 King St., Palmerston, N0G 1P0	(519) 343-3906
Elm Park Motel	R.R. #2, Palmerston, N0G 2P0	(519) 343-2540
Hillside Motel	15 Maple St., Walkerton, N0G 2V0	(519) 881-1470
Walkerton Inn	1305 Yonge St.S., Walkerton, N0G 2V0	(519) 881-0629
Lighthouse Motel	1864 Hwy #9, Walkerton	(519) 881-0202

Bed & Breakfast

Silver Creek	17 Yonge St. S., Walkerton, N0G 2V0 (Box 957)	(519) 881-0252
Forest Edge	R.R. #3, Durham N0G 1R0	(519) 369-5661
Backdoor	240 Garafraxa St., Durham, N0G 1R0 (Box 426)	(519) 369-6507
Country Lane	9792 Creek Rd. (R.R. #3), Clifford, N0G 1M0	(519) 327-8236
Little Pond	211572 Baseline Rd. (RR#4) Mt. Forest N0G 2L0	(519) 323-4458
Andrews Berry Farm	6765 Hwy # 89 (RR #4) Mt. Forest, N0G 2L0	(519) 323-2097
Washer's Eden	270 Fregus St. N., Mt. Forest, N0G 2L2	(519) 323-0028
Viewfield Inn	951 Old Durham Rd. (RR #2) Walkerton N0G 2V0	(519) 881-0879
Still Life Retreat	394591 Concession 2 (RR #1) Durham, NOG 1R0	(519) 369-3663
Dr. James Gunn Inn	283 Durham Rd. E., Durham, NOG 1R0 (Box 925)	(519) 369-6876

STARFEST Rules of Conduct

To make **STARFEST** a safe and enjoyable experience for everyone, we would appreciate that you (and your dependants) abide by the following rules of conduct. The NORTH YORK ASTRONOMICAL ASSOCIATION **reserves the right to eject any person not willing to comply with these rules of conduct.**

1. **WALK DON'T DRIVE** while inside the campground. It's a great way to meet people and make new friends. When walking on roadways please **walk on the left side of the road** so that you can see on-coming traffic. At night please bear in mind that the driver in an on-coming car may not see you as well as you see the car. Please **keep your red flashlight on so you can be seen; never play chicken with the cars. You will lose. Always yield the right of way.**
2. **DRIVE CAREFULLY.** People and telescopes are everywhere.
3. **DON'T MOVE CARS AT NIGHT** unless required by a medical emergency. If you must move your car, please use red filters to cover your headlights and backup lights. Red filters are available at the registration desk or in the main tent.
4. **PARKING FOR NON-CAMPERS.** If you are not camping, please park your car in the designated parking area, near the registration tent. If you have a telescope to set up, please do so in the special observing area set up for non-campers. Only campers may park in the camping area.
5. **RED LIGHTS AT NIGHT.** White lights are not allowed anywhere in the observing area at night. Please:
 - cover your flashlight with a red filter and keep the beam aimed at the ground
 - cover your trunk and car interior lights with red filters if you are going to be accessing your car during the night
 - DO NOT USE propane or naphtha camping lanterns
 - NO CAMPFIRES
 - shield computer monitors, keep screen intensity to a minimum, and use night vision mode or a red filter.
6. **WE WILL NOT TOLERATE:**
 - conduct which is offensive and disturbing to others
 - loud noise or music
 - excessive consumption of alcohol or use of other intoxicating substances.
7. **STARFEST IS AN ASTRONOMY CONFERENCE ... NOT A ROCK CONCERT.** You are encouraged to share your interest in astronomy, not your taste in music. Please use headphones if you must observe with music.
8. **PETS** We love them, **but would prefer you leave them at home.** If you feel compelled to bring your pet please ensure they are properly restrained, you clean up after them and they do not disturb others at Starfest.
9. **PLEASE RESPECT THE PRIVACY OF THE SEASONAL CAMPERS.** Do not trespass or remove anything from their campsites (seasonal campsites will be clearly marked).
10. **THEFTS CAN OCCUR,** so please protect your valuables.
11. All vendors operating in the River Place Campground during Starfest must be vetted by the NORTH YORK ASTRONOMICAL ASSOCIATION.
12. Please obey all River Place Campground rules.
13. **Children and Teens.** Parents will be held accountable for the actions of their dependant children while at Starfest. Please review these rules of conduct with them and ensure they are in compliance. In particular, it's ok to hang out and chill with your friends, but not inside the recreation hall. The Red Light Café and Small Tent may be used providing nothing is damaged, nothing walks off and the area is left clean and tidy.
14. The NORTH YORK ASTRONOMICAL ASSOCIATION does not accept any responsibility or liability for damage or injury to you or your equipment.