



**The 100th Annual Meeting
of the Astronomical Society of the Pacific**

**The 1988 General Assembly
of the Royal Astronomical Society of Canada**

**The 1988 Summer Meeting
of the Western Amateur Astronomers**

June 28 to July 3, 1988
University of Victoria
Victoria, British Columbia, Canada

The organizing committee gratefully acknowledges the financial support of the following:

Natural Sciences and Engineering Research Council

Province of British Columbia

Canadian Institute for Theoretical Astrophysics

University of Victoria

Dominion Astrophysical Observatory, The National Research Council of Canada

Lieutenant Governor, Province of British Columbia

This Meeting is co-hosted by the following:

Dominion Astrophysical Observatory, The National Research Council of Canada

Department of Physics and Astronomy, University of Victoria

Victoria Centre, Royal Astronomical Society of Canada



Haida Moon

Artist: Clarence Steven Mills

Haida Name: Gah-ghin skuss (out of your own land)

Born: October 30, 1958

Member of the Eagle Clan, Skidegate

Crest: Raven, Grizzly Bear Carvings in Argillite, Ivory, Yellow Cedar, Silver and Gold Limited Edition Silkscreen Prints

Clarence Mills was born into the Wilson family at Skidegate, Queen Charlotte Islands. His grandmother Na-nai (Kathleen Hans) told his mother that he was destined to be a Haida carver—a reincarnation of her late husband, Isaac Hans, a renowned Haida artist. Henry Young, his great-grandfather, was also a great Haida carver, and from this family Clarence received his Haida name.

Through numerous private sales and commissions, Clarence has sold limited edition silkscreen prints, carvings in argillite, ivory, red and yellow cedar, silver and gold jewelry. Slowly gaining some international exposure through art shows and commissions, his objective now is to continue to capture the beauty of the Haida art by carving traditional monumental size totems and plaques, and producing silkscreen prints and jewelry in silver and gold.

Haida Arts & Graphics

R.R. #1, Box 10

Skidegate, B.C.

Queen Charlotte Islands

V0T 1S0

(604) 598-0431

If you wish to purchase a limited edition of this print, Haida Moon, or are interested in purchasing other prints by the artist, please be aware that examples of his work, with an order form will be available at the Registration Desk on June 28.

The University of Victoria

This Meeting will take place entirely on the campus of the University of Victoria, with its scenic view of Haro Strait and the snow-capped Olympic Mountains. Founded in 1963, the University—during the school year—has an enrolment of approximately 12,000 full and part-time students in its undergraduate, graduate, and professional schools.

Victoria

In an incomparable location by the sea, Victoria is the provincial capital of British Columbia and Vancouver Island's major city. It's a charming place, with quaint shops that beckon with their rare antiques, English tweeds, and Scottish tartans. Serene waters invite you to enjoy some of the world's most exciting salmon fishing and scuba diving. Semi-tropical flowers and plantings, abound at every turn, inviting you to linger and reflect in this most temperate of Canada's climates. And here and there you will see traces of England: in the architecture, from the shops and stores to the Parliament Buildings; in the activity, from the cricket matches to the tea-time get-togethers; and in the ambience, from the sailboats gliding through the harbour to the double-decker buses.

Part of the fascination of the West Coast is the Native Indian tradition—the Pacific Northwest Indian culture has gained worldwide respect through its art and dancing. The Royal British Columbia Museum has an excellent collection of Northwest Coast Art which is on exhibit in the First People's Gallery.

RASC/ASP/WAA Preliminary Meeting at a Glance

Friday, June 24th

Displays and Exhibits set-up
MacLaurin and Elliott Buildings

Saturday, June 25th

8:00 a.m.
Registration;
Teachers' workshop
MACLAURIN BUILDING

9:00 a.m.-5:00 p.m.
Teachers' workshop

6:00 p.m.
Hamburger Barbecue
COMMONS BLOCK

9:30-11:30 p.m.
DAO Tour and
Star Party

Sunday, June 26th

9:00 a.m.-5:00 p.m.
Teachers' Workshop

Monday, June 27th

FREE DAY

Tuesday, June 28th

8:30 a.m.-4:00 p.m.
Registration,
Conference Office,
CRAIGDARROCH BUILDING

8:30 a.m.-4:00 p.m.
ASP Board Meeting

12:30-4:00 p.m.
TOURS (IOS/DAO/
BUTCHART GARDENS)

5:00-7:00 p.m.
Lieutenant Governor's
Reception—Government House

8:00-10:00 p.m.
Welcoming Reception,
COMMONS BLOCK

Wednesday, June 29th

8:00 a.m.
Registration,
MACLAURIN BUILDING

8:30 a.m.-5:00 p.m.
The Extragalactic Distance Scale
Symposium

9:30-11:30 p.m.
Tour and Observing, DAO
(supported by RASC telescopes)

Thursday, June 30th

8:00 a.m.
Registration,
MACLAURIN BUILDING

8:30 a.m.-5:00 p.m.
The Extragalactic Distance Scale
Symposium

8:30 a.m.-5:00 p.m.
RASC/ASP/WAA Meeting

1:30 p.m.
Trumpler Prize Lecture

2:00 p.m.
History of Astronomy (invited
lectures)

WAA/RASC Council Meetings

4:30 p.m.
ASP Membership Meeting

7:30 p.m.
Hogg Lecture, University Centre

9:00 p.m.
Murphy Slide Show and
Reception, MACLAURIN
BUILDING

Friday, July 1st

8:00 a.m.
Registration,
MACLAURIN BUILDING

8:30 a.m.-5:00 p.m.
The Extragalactic Distance Scale
Symposium

Muhlmann Prize Lecture

Poster Discussion

RASC/ASP/WAA Meeting

6:00-10:00 p.m.
Awards Banquet and Giant
Door Prize Draw,
COMMONS BLOCK

Saturday, July 2nd

8:00 a.m.
Registration,
MACLAURIN BUILDING

8:30 a.m.-5:00 p.m.
RASC/ASP/WAA Meeting

5:00 p.m.
Salmon Barbecue Tour to
Sooke

Sunday, July 3rd

TOURS: BUTCHART GARDENS,
GULF ISLANDS

You are cordially invited to participate in an international meeting of three astronomical societies, featuring sessions for professional scientists, amateur astronomers, science educators, and everyone interested in the exploration of the universe. The Meeting is co-hosted by the University of Victoria and the Dominion Astrophysical Observatory, which is celebrating its 70th Anniversary, and the Royal Astronomical Society of Canada, Victoria Centre.

Quick Overview of Meeting Plans

The scientific meeting (Wednesday, June 29 to Friday, July 1) will feature a Symposium on the Extragalactic Distance Scale, with noted speakers from around the world. The Meeting will conclude with a banquet Friday evening. Contributed papers **in poster format** are being solicited on the topics of the Symposium and on other topics of astronomical research.

The three Societies are also sponsoring a more general meeting for professional and amateur astronomers (Thursday, June 30 to Saturday, July 2). Three kinds of talks will be featured:

- invited nontechnical lectures on new developments in astronomy by noted astronomers
- oral contributed papers by professional astronomers who prefer the oral format to the poster format
- invited and contributed talks on amateur astronomy

The weekend before the Meeting, there will be a credit workshop on teaching astronomy in grades 3–12. A separate brochure about this workshop is available and provides more detail.

In addition, there will be tours and social events for Meeting participants. These are explained later in this booklet, together with travel discounts and information on accommodation.

The Extragalactic Distance Scale

The Scientific Symposium this year is on an exciting and controversial area of modern astrophysics and features invited talks by a distinguished international roster of scientists. The order of the talks is as given below. Note that they continue through the afternoon of Friday, July 1 and lead into the culminating banquet and door prize draw on Friday evening.

Invited Speakers:

1. **An Historical Perspective**
G. de Vaucouleurs (U. of Texas)
2. **Local Group Galaxies**
The Magellanic Clouds—
M.W. Feast (S. African Astrophysical Observatory)
Cepheids in Local Group Galaxies—W.H. Freedman (MWLCO)
RR Lyrae Stars in Nearby Galaxies—C.J. Pritchett (U. of Victoria)
Planetary Nebulae as Distance Indicators—G.H. Jacoby (NOAO-KPNO)
Novae as Distance Indicators—
H.C. Ford (U. of Michigan)
Review of the Local Group Distance Scale—J.R. Mould (Cal. Tech.)

3. Calibration of Standard Candles

Calibration of the Cepheid Period-Luminosity Relation—
A.R. Walker (NOAO-CTIO)
Nova Expansion Parallaxes—
J.G. Cohen (Cal. Tech.)
The Fisher-Tully Relation—
B. Tully (U. of Hawaii)
Constraints on H_0 from the Globular Clusters—
D.A. Vandenberg (U. of Victoria)
HII Regions—J. Melnick (ESO/U. of Chile)
The Brightest Stars in Galaxies—
R.M. Humphreys (U. of Minnesota)
Supernovae as Distance Indicators—D.R. Branch (U. of Oklahoma)
Parallaxes with Sub-Milliarcsec Accuracy—D.G. Monet (US Naval Obs.)

4. The Virgo Cluster

Globular Cluster Systems—
W.E. Harris (McMaster U.)
Novae as Distance Indicators—
S. van den Bergh (NRC-DAO)
Infall Velocity into the Virgo Cluster—J. Huchra (CFA)
Review of Distance Determinations for the Virgo Cluster—
G.A. Tamman (U. of Basel)

5. Deviations from a Smooth Hubble Flow

Large-scale Motions of, and Best Distances To, Galaxies—
D. Lynden-Bell (Cambridge U.)
Evolutionary Effects and Their Impact upon the Distance Scale—S.G. Djorgovski (Cal. Tech.)
Review of Deviations from a Smooth Hubble Flow—J.E. Gunn (Princeton U.)

The scientific organizing committee (chaired by S. van den Bergh) invites **contributed papers** on the subject matter of the Symposium in poster format. Posters will be on display near the meeting hall and time will be set aside for viewing and discussing the poster papers.

In addition, the committee invites contributed papers in either poster or oral format on other areas of astronomical research. Oral papers will be scheduled during the general meeting of the three Societies. See the next section for more information.

Please note that the Symposium begins with the reception on Tuesday evening, June 28 and ends with the banquet and giant door prize drawing on Friday evening, July 1. We suggest that you make your travel arrangements to leave Victoria on Saturday or Sunday. This way you can enjoy the excellent banquet and avoid the travel congestion on July 1.

The proceedings of the Symposium will be published in book form as part of the new **ASP Conference Proceedings** series. The volume will be edited by S. van den Bergh and C.J. Pritchett. The cost of one copy of the proceedings is included in the registration fee for the Symposium. Additional copies can be ordered on the registration form.

Please use the abstract form in this booklet to submit contributed papers. **The deadline for abstracts is May 2, 1988.**

Graduate Student Travel Support for the Scientific Meeting:

CITA, the Canadian Institute for Theoretical Astrophysics, is providing a travel subsidy to the Meeting to encourage graduate students to participate. For further information, students should contact:

Chris Pritchett
Department of Physics &
Astronomy
University of Victoria
P.O. Box 1700
Victoria, B.C. Canada
V8W 2Y2

Phone: (604) 721-7704

FAX: (604) 721-7715

Bitnet: PRITCHET@UVPHYS

Deadline for receipt of applications for graduate student travel support is **April 15, 1988.**

Session on the History of Astronomy

(Afternoon of June 30)

Invited Talks:

Tale of Two Telescopes:

Glimpses of the First 70 Years of the Dominion Astrophysical Observatory

Alan H. Batten

Lick Observatory: The First Century

Donald E. Osterbrock

The organizing committee welcomes oral contributed papers of 15 minutes duration (including questions) on topics in the history of astronomy during the RASC/ASP/WAA joint paper sessions.

Please use the regular abstract form in this booklet to submit history papers. **The abstract deadline is May 2, 1988.**

The RASC/ASP/WAA Meeting

(Thursday, June 30 to Saturday, July 2)

For the first time, the Royal Astronomical Society of Canada, the Astronomical Society of the Pacific, and the Western Amateur Astronomers are meeting together. The organizing committee has planned a program featuring invited talks by noted professional and amateur astronomers, contributed papers, exhibits, and time for socializing.

1. Special Feature Lecture

Hubert Reeves (CNRS, Paris):
The Early Moments of the Universe (The 1988 Helen Sawyer Hogg Lecture of the RASC and the Canadian Astronomical Society; open to the public)

2. Invited Non-Technical

Lectures

The Search for Extraterrestrial Intelligence

Frank Drake (U. of California, Santa Cruz)

Research Opportunities for Amateur Astronomers

Stephen Edberg (JPL: 1988 G. Bruce Blair Award Lecture)

The Large-Scale Structure of the Universe

James Gunn (Princeton U.)

Black Holes, Warped Space-Time and Supercomputers

William Kaufmann (San Diego State U.)

Central Monsters in Galaxies

John Kormendy (Dominion Astrophysical Observatory: 1988 Muhlmann Prize Lecture)

Comet Hunting

David Levy

Astrophotography

Jack Newton (1988 Amateur Achievement Award Lecture)

Quasars: A 25th Anniversary Report

Maarten Schmidt (Cal. Tech.)

3. Contributed Papers

The organizing committee cordially invites contributed papers (10 minutes long) to be delivered during the RASC/ASP/WAA meeting. The audience for these sessions is expected to include professional astronomers, amateurs, educators, and interested "armchair astronomers". Some examples of the types of papers the committee is looking for include:

- a. Papers on astronomical research that are not on the subject of the Symposium and that might be of special interest to a more varied audience;

- b. Papers on astronomical research or other activities carried out by amateurs;
- c. Papers on astronomy education;
- d. Papers on more interdisciplinary subjects, light pollution, astronomical funding, or the history of science, etc.

Please use the abstract form found in this booklet to submit papers. **Abstract deadlines are May 2.** Indicate under special instructions if you must give your paper on a certain day or days. We will try to honour such requests, but cannot guarantee your choice.

The organizing committee reserves the right to accept or reject papers based on the best interests of the Meeting.

A Workshop on Teaching Astronomy in Grades 3-12

(Saturday, June 25 and Sunday, June 26)

The weekend before the Meeting, the RASC and ASP will sponsor a non-credit or credit workshop on astronomy for teachers, librarians, curriculum supervisors, and youth group leaders. Participants will be exposed to innovative classroom activities, teaching resources and developments in astronomy and astronomy education. They will receive materials they can use in the classroom and in learning more about astronomy. On Saturday evening, there will be a special tour of the Dominion Astrophysical Observatory.

A brochure is available about the workshop from the Conference Office, University of Victoria. (See address and numbers at the end of this booklet; please make requests for workshop information on a separate sheet and include **your** name and address.)

ASP Membership Meeting

The Astronomical Society of the Pacific will hold its 100th Annual Membership Meeting on Thursday afternoon, June 30, at approximately 4:30 p.m. All members of the Society are invited to participate in this meeting. The officers and staff of the Society will report on ASP programs and activities and respond to questions and suggestions from the members.

Poster Papers and Displays

Poster sessions will be set up near the lecture halls throughout the Meeting. Posters will be set onto 1 m. by 1 m. display boards.

Astrophotography and Display Competition

Open to **all** participants at this Meeting, will be a display and astrophotography competition. Prizes will be awarded. Please bring no more than five photographs to display. Each display or photo should be labeled with a title, description and your name.

Commercial Exhibits

Throughout the Meeting there will be a special area set aside for exhibits of astronomical equipment, books, magazines, software, and other educational materials. Companies wishing to exhibit should contact: Juliana Ver Steeg, Exhibits Manager, ASP, 1290 24th Avenue, San Francisco, CA. 94122 U.S.A.; phone: (415) 661-8660. After April 15th: 390 Ashton Avenue, San Francisco, CA. 94112, U.S.A.

Companies located only in Canada should contact: Jack Newton, 801 Stanehill Place, R.R. #1, Victoria, B.C. CANADA, V8X 3W9; phone: (604) 478-8065.

Group Photo and T-Shirts

An 8" x 10" colour group photograph will be taken on Thursday, June 30 during the morning coffee break. To receive a print of this photo, please check the appropriate box on the registration form. Photos may be available late Friday; otherwise they will be mailed to you.

A commemorative T-shirt will be produced in connection with the Meeting, featuring the "Haida Moon" logo (seen on the cover of this booklet) on a white background. Please use the registration form to order and be sure you specify how many shirts in each size you require.

Special Events

1. Lieutenant Governor's Reception—Government House

Their Honours, the Honourable Mr. and Mrs. Robert Rogers, have graciously consented to hosting an official Reception in honour of the delegates to this Meeting. The Reception will be held at Government House on Tuesday, June 28, 1988 at 5:00 p.m.

Attendance at this prestigious event will be limited to the first 200 Reception registrants.

Sufficient time will be allowed following the earlier events of June 28th to allow for a return to Campus in preparation for the evening's activities. Please note that in keeping with the setting of the Reception by the Queen's representative, moderately formal dress is appreciated.

2. Welcoming Reception (Tuesday, June 28, 8:00 - 10:00 p.m., Commons Block)

Symposium participants are invited to a get-acquainted reception on the evening before the sessions begin. Light snacks will be served and no-host bar service will also be available.

3. "Murphy" Slide Show and Get-Acquainted Session (Thursday, June 30, 9:00 p.m., David Lam Auditorium, MacLaurin Building)

It is a tradition at RASC meetings to hold an informal get-together session early in the General Assembly and to invite participants to bring either unusual, beautiful, or awful slides to show. An informal song contest will also be held. Everyone attending any part of the Conference is invited. The RASC Victoria Centre is providing snacks and beverages.

4. Awards Banquet and Giant Door Prize Draw (Friday, July 1, 6:00 - 10:00 p.m., Commons Block)

We invite you to join us for this special banquet in the Commons Dining Room, overlooking the breathtaking Olympic Mountain range. Entertainment will be provided by the UVic Music Department. We will also briefly honour the 1988 award winners of the three Societies and hold our giant door prize draw. A special guest will be the Honourable Stanley Hagen, Minister of Advanced Education and Training, Province of British Columbia.

5. Salmon Barbecue, Logging Show, and Dance (Saturday, July 2, 5:00 p.m. - 12:00 midnight, Sooke, British Columbia)

To wrap-up our Meeting, we have arranged a special outing. After a scenic bus ride through the beautiful forest areas along the South Coast of Vancouver Island, you will arrive at the fishing and logging village of Sooke. A no-host bar and dinner of succulent barbecued salmon will be followed by a breathtaking logging show, as volunteer firemen wield axes in an exciting competition. A dance with a local "grass-roots" band will conclude the evening program, hosted by the Sooke Community Association.

Folkfest and Canada Day

We have scheduled this Meeting during the annual eight-day celebration of Canada's ethnic heritage (June 26 to July 3). This traditional event will take place near the Inner Harbour in beautiful downtown Victoria, a short bus ride from the University. It features 50 performing groups, 15 different ethnic food booths, craft displays, and a beer garden. It's all free (except for the refreshments), so plan to drop in and enjoy!

A massive fireworks display is planned for Fort Rodd Hill, a turn-of-the-century restored military fort west of the city, after sunset on Friday, July 1. For further information, you can call (604) 388-5322.

Tours

A number of guided tours have been arranged for Meeting participants on an additional fee basis. Family members of participants are welcome. Each person will be required to fill out a health and safety waiver (which will be in your registration packet) before boarding the buses.

1. Institute of Ocean Sciences and Dominion Astrophysical Observatory (Tuesday, June 28)

Fee: \$15 Can/ \$13 US (including bus)

At beautiful Patricia Bay, a few miles north of Victoria, the Institute of Ocean Sciences (IOS) and the Pacific Geoscience Centre (PGA) are equipped with the most sophisticated tools to unlock further mysteries of the oceans. The Canadian Hydrographic Service surveys the vast waterways; a fleet of ships and a submersible supports the fieldwork of the researchers and hydrographers. Many problems today are far reaching and global in nature so programs and projects are often multidisciplinary and collaborative amongst many nations.

The Dominion Astrophysical Observatory (DAO) on Little Saanich Mountain on the outskirts of Victoria is celebrating its 70th anniversary this year. When the 1.8-m (72") telescope obtained its first spectrogram on May 6, 1918, it was the largest telescope in the world. In 1962, it was joined by a 1.2-m (48") telescope. Both are equipped with extremely efficient spectrographs and a variety of specialized electronic detectors. The Observatory has facilities for the design and fabrication of state-of-the-art optical instrumentation for its own telescopes and for the 3.6-m (140") Canada-France-Hawaii Telescope on Mauna Kea, whose mirrors were ground and polished at DAO. It also

runs the newly formed Canadian Astronomy Data Centre, which maintains archives of data (especially from spacecraft) for distribution to Canadian astronomers.

The tours during the day will enable visitors to see the 1.8-m telescope and its display gallery, and to enjoy the spectacular views of the surrounding countryside, including the Straits of Juan de Fuca. Various forms of fauna and flora may also be seen (deer, bald eagles, balding astronomers, arbutus trees, etc.) See below for an evening tour of the Observatory.

Leaves: 12:30 p.m., Parking Lot 5, U. of Victoria

Returns: 4:00 p.m., same location

2. Butchart Gardens (Tuesday, June 28; repeated on Sunday, July 3rd)

Fee: \$25 Can/\$21 U.S. (including bus)

You will tour the world-famous 50-acre gardens overlooking the inlet to Brentwood Bay. Accompanied by a naturalist, we will view classical English, Japanese, and rose gardens and enjoy one of the most spectacular horticultural displays in the hemisphere. Walking shoes and comfortable clothes are a must.

Leaves: 12:30 p.m., Parking Lot 5, U. of Victoria

Returns: 4:00 p.m., same location

3. Dominion Astrophysical Observatory Evening Tour and Star Party

offered twice:
Saturday, June 25 for teachers in the workshop; Wednesday, June 29 for conference participants

Fee: \$10 Can/\$9 U.S.

For a description of the Observatory, see tour 1 above. *Weather permitting*, the evening tour will include observing with the 1.8-m telescope, as well as with small instruments operated by members of the RASC Victoria Centre.

Leaves: 9:30 p.m., Parking Lot 5, U. of Victoria

Returns: 11:30 p.m., same location

4. Butchart Gardens (Sunday, July 3)

See description under #2. It's the same tour, same time, same fee, but on Sunday.

5. Gulf Islands Ferry Tour (Sunday, July 3)

Fee: \$20 Can/\$17 U.S.

To close the Meeting, we offer a breathtaking ferry tour around the picturesque Gulf Islands, northeast of Victoria. Participants will take the inter-island "milk run" virtually guaranteed to provide opportunities to view eagles, seals, and perhaps Killer Whales. The tour includes charter buses, ferry tolls, as well as a bag lunch.

Leaves: 9:30 a.m., Parking Lot 5, U. of Victoria

Returns: 2:00 p.m., same location

Dormitory and Meal Plans

The University is located in a residential area, with the closest restaurants approximately 1 km from campus. Thus we have arranged a reasonably priced daily bed and board plan, available from the night of June 24 through noon on July 3. Please be aware that these packages are set and cannot be altered to accommodate individual needs. However, since the plans are on a daily basis, you can feel free to select as many or as few days as you require. If you wish to arrive early or stay late, please contact the Housing Office directly to make your own arrangements.

A block of dormitory rooms has been reserved at the University residences. Most rooms are singles (one bed), but a few doubles (two beds) are also available. **There is no price difference per person between single and double rooms.** (We presume, therefore, that only couples or really good friends will prefer double accommodation.)

Washrooms are centrally located on each floor. No maid service is provided. However, each dormitory package includes meals each day, linen, towels, blankets, and a parking permit for the general lots on campus. (Remember that you may wish to bring alarm clocks, extra hangers, and other items one takes for granted in a hotel room but rarely finds in a dorm room). Children may stay in parents' room on foamies leased from Housing at \$3.00/night. If you wish to arrange for a foamie, please write to the Conference Office, detailing dates of need. You will receive information about children's meals based upon your request.

The dormitory registration desk at the Housing Office in the Craigdarroch Building (see map) will be open from 7:30 a.m. to 12 midnight daily. Their telephone is (604) 721-8395. If you have to arrive on campus after midnight, please phone the Housing Office,

in advance, to make arrangements for late arrival.

Each day's package includes accommodation, breakfast, lunch, and dinners other than the Friday and Saturday night special functions. Thus, if you are coming for the Symposium only, for example, you will want to arrive in the afternoon on Tuesday, June 28 and reserve the dorm package for June 28 through July 1. That will take you through Friday night and the first two meals on Saturday (July 2).

Note that the packages for different days are not all priced equally, because there will be special food functions on several days.

Special vegetarian diets: Arrangements will be made upon written request. Please write to the RASC/ASP/WAA Meeting, c/o Conference Office, University of Victoria.

All campus meals will be served in the Cadboro Commons Block, adjacent to the residence halls.

Hours of service will be:

Breakfast	7:15 a.m. - 8:30 a.m.
Lunch	12:00 p.m. - 1:30 p.m.
Dinner	4:45 p.m. - 6:00 p.m.

Parking and Recreational Facilities

Free parking (with a permit provided at registration) will be available to all participants staying in the University of Victoria residences. Anyone coming from off campus will have to purchase a daily permit for \$1.00 (4 quarters) at the machines at each main entrance to the campus. This will permit them to park in all general parking lots — the ones located on the *outside* of the Ring Road which frames the campus.

The McKinnon Building on campus houses a variety of sports facilities: squash courts, a weight room, swimming pool, and tennis courts. A series of jogging trails skirt the campus through the woods and adjacent golf course, offering scenic views for joggers. Temporary athletic passes will be available to Conference participants at minimal cost; please inquire at the Conference desk once you arrive.

Hotels in Downtown Victoria

For those who do not wish to stay on campus, we have arranged a discount on hotel rooms in downtown Victoria (approximately a 20-minute drive from the campus).

The hotels where blocks are reserved for the Astronomical Society Conference are:

The Coast Harbour Towers
345 Quebec Street
Victoria, B.C. V8V 1W4

Telephone: (604) 385-2405
Telex: 049-7386

Rates:

Single at \$75 Can, plus tax
Double at \$85 Can, plus tax

File Name: RASC

Block Booking Dates: June 24 - July 2, 1988

Cut-off date: May 1, 1988

The Huntington Manor Inn
330 Quebec Street
Victoria, B.C. V8V 1W3
Telephone: (604) 381-3456
Telex: 049-7522

Rates:

June 28-30, 1988 (inclusive)
Single/Double/Twin at \$75 Can,
plus tax

July 1-2, 1988
Single/Double/Twin at \$94 Can,
plus tax

File Name: ASTRO

Block Booking Dates: June 28-July 2, 1988

Cut-off date: May 1, 1988

Please contact the hotels to make your own accommodation arrangements.

If you are unable to find suitable hotel accommodation, including these two facilities, please call Tourism Victoria Hotel Reservations at (604) 382-1131 and they will provide alternatives.

General Information for Travellers

Weather

The mean daily temperature for June is 17.7°C/64°F; July, 19.7°C/67°F. Average rainfall for June is 20.1 mm.; July, 13.4 mm. Please bring warm, comfortable clothing as summer evening ocean breezes can be brisk.

Currency

The Conference rates are fixed, as specified on the registration form. As of March 1988, \$1.00 U.S. is worth \$1.20 Canadian, but these rates fluctuate daily. American currency is readily accepted by retailers throughout British Columbia, and can be used anywhere on the University of Victoria campus. Banks within 1.5 km from campus will exchange cash or travellers' cheques. Other foreign currency exchange brokers (3) are located in downtown Victoria.

Immigration Requirements

Although Canada classifies many countries as Visa exempt (including the U.S.), it is suggested that you contact the office of the nearest Canadian representative in your country for current information. Visitors to Canada (and returnees to the U.S.) will need identification, preferably a passport or birth certificate. United States citizens who were not born in the USA need proof of USA citizenship.

Flying to the Conference

Because the Meeting is sponsored by societies in both the U.S. and Canada, there are two "official" airlines for the Conference, each offering discount fares. One originates its flights in the U.S., the other in Canada.

1) For U.S. participants, the official airline of the meeting is **United**. The airline offers:

- 5% off any current fare on United flights (including excursion and Ultra Saver fares) originating in the U.S. and going to Seattle or Vancouver (see below for making connections)

- 40% off full coach fares originating in the U.S.
- Canadian Special Events Fares (usually 30-35% discount) for travel within Canada on United

To obtain these special fares (not available to the public), you or your travel agent must call the United Convention Desk toll-free number:

1-800-521-4041 in the U.S.

The convention desk is open from 8:00 a.m. to 11:00 p.m. EST.

You (or the travel agent) must give the Astronomical Society account number 8056N to the agent, who will be able to book your flights through to Victoria. (The agents can book flights not only on United, but also on connecting airlines.) Please note that these savings are only available through the United Convention Desk, but tickets may be purchased either from United or from a travel agent of your choosing.

The discounts apply to travel beginning June 19 and ending July 5, 1988. Full Mileage Plus credit is awarded on all discounted fares. (Some fares may have restrictions as to days of the week you must travel, refunds, length of stay, etc.)

2) For Canadian participants, the official meeting carrier is **Canadian Airlines International**.

Savings of 20% or more are available to delegates on routes within Canada, depending on date of travel, length of stay, etc. It is most important to **book well in advance** to obtain the lowest possible fares.

For assistance with your travel arrangements, please call Canadian's special convention Reservations Agents:

Canada-Wide TOLL-FREE Line
1-800-268-4704

(In Toronto 675-8246)

Please remember to mention the name of the event (Astronomical Society Meeting) when booking.

Getting to Victoria from Vancouver

A. Airlines

From Vancouver International Airport to Victoria International Airport (approximate flight time: 25 minutes):

- Air Canada (In the U.S.) 1-800-663-3721
- Air B.C. 1-800-663-0522
- Helijet Airways (604) 382-6222 (Victoria); (604) 273-1414 (Vancouver)
- Time Air 1-800-663-3502

From downtown Vancouver to downtown Victoria (approximate flight time: 30 minutes):

- Air B.C. 1-800-663-0522
- Helijet Airways (604) 382-6222 (Victoria); (604) 273-1414 (Vancouver)

U.S. participants please note that the United Convention Desk agents can book these flights for you as a convenience.

Airporter Service is available from Victoria International Airport to downtown Victoria every 30 minutes. Taxi service directly to the campus is approximately \$30.00 Canadian.

B. Ferry

B.C. Ferries (sailing time: 1 hour, 35 minutes) Note: The ferries run between Tsawwassen (39 km. south of Vancouver) to Swartz Bay (32 km. north of Victoria).

Summer Schedule: Hourly sailings daily 7:00 a.m. to 10:00 p.m.

Call Vancouver (604) 669-1211
Victoria (604) 386-3431

C. Ground Transportation

Pacific Coach Lines (Connects downtown Victoria to Vancouver, including the Vancouver International Airport via B.C. Ferries)

Summer Schedule: Hourly service

Victoria (604) 385-5731
Vancouver (604) 662-7575
Telex 049-7324

Getting from Seattle to Victoria

A. Airlines (from Seatac Airport to Victoria International Airport)

Air B.C. 1-800-663-0522

San Juan Air 1-800-265-4873

from Canada only

or (604) 383-7755

(in the U.S., United can book these connecting flights for you and may be able to get you a cheaper fare)

B. Float Planes (from downtown Seattle to downtown Victoria)

Kenmore Air 1-800-543-9595

1-800-423-5526 U.S.

Lake Union Air

1-800-826-1890 Can

1-800-692-9224 U.S.

C. Ferry

Victoria Clipper (sailing time: 2 hours, 30 minutes)

Summer Schedule: Daily sailings — 2 in each direction

Seattle (206) 448-5000

Victoria (604) 382-8100

B.C. Steamships: Princess Marguerite and Island Princess (sailing time: 4 hours, 30 minutes)

Roundtrip cruises May through October

Victoria (604) 386-1124

Seattle (206) 441-5560

Off Season (604) 388-7397

Telex 152-482

There is additional ferry service running between Anacortes, WA. (north of Seattle) to Sidney, B.C. (approximately 30 km. north of Victoria); and Port Angeles, WA. (on the Olympic Peninsula) to the Inner Harbour in downtown Victoria. Call these numbers for information and schedules:

Anacortes, WA. to Sidney, B.C.

Canada: (604) 656-1531

U.S.: (206) 464-6400

Port Angeles, WA. to Victoria, B.C.

Canada: (604) 386-2202

U.S.: (206) 457-4491

D. Ground Transportation

Evergreen Trailways (Connects downtown Victoria with downtown Seattle)

Daily Schedules

Canada 1-800-443-5788

U.S. 1-800-426-7532

Getting from Downtown Victoria or Victoria International Airport to the Campus

The University of Victoria is approximately 20 minutes from downtown Victoria and 30 minutes from the airport by car. Airport taxis cost about \$30 Can. A shuttle bus leaves from the airport to downtown Victoria at regular intervals. Approximate cost: \$10.00.

Car Rentals

We have arranged with Avis Rent-a-Car to receive a convention discount on car rentals in Victoria. Participants will receive a 20% discount from the standard convention rates. Our rates will be:

Car Class/ Model	Daily	Weekly	Add'l Day
A Colt	\$25.56	\$127.20	\$22.40
B Omni	27.96	135.20	24.00
C Aries/ Tempo	34.36	159.20	28.00
D Daytona/ Mustang Thunderbird	35.96	167.20	32.00
E Taurus/ Lancer Lebaron 600	39.96	183.20	36.00

- All cars rented on a daily basis include 100 free kilometers and cost 9 cents per kilometer after that
- All cars rented on a weekly basis include 1050 free kilometers and cost 9 cents per kilometer after that
- After one week, all additional days include 150 free kilometers and cost 9 cents per kilometer after that

These special rates have been arranged with the Avis franchise in Victoria and not with the entire Avis system. To obtain these rates, you can call the Avis toll-free numbers:

● in the U.S.: 1-800-331-1212

● in Canada: 1-800-268-2310

The Avis operators at these numbers will **not** know about the discount. The discount will be applied by the staff at the Victoria Avis office. Make your reservations for a car in Victoria in the normal way, but request that the agent type into the record **under remarks**: "Astronomical Society—Special Rates". You will not be able to get your discount unless this is typed into your record. (If you have a travel agent make the reservation, remember to have them insist on this.)

If you run into trouble with this procedure, contact Bruce Alexander, the manager of the Victoria Avis office, at (604) 386-8468.

Registration

Payment must accompany a completed registration form in order for it to be processed. Please submit a separate registration form for each person; blank registration forms may be photocopied.

The University of Victoria **will** not invoice, nor will postdated cheques be accepted. Please submit a cheque or money order in **Canadian Funds** or **U.S. Funds**, payable to **The University of Victoria**. To simplify currency exchange procedures, payment by VISA or MASTERCARD is possible. To use these systems, delegates are asked to enter their card number, expiration date and signature on the appropriate space on the registration form.

Receipts will be mailed to all registrants.

Please complete the registration forms and mail to:

RASC/ASP/WAA
Conference Services
University of Victoria
P.O. Box 1700
Victoria, B.C., Canada
V8W 2Y2

Refund Policy

A processing fee of \$25 will be withheld for any cancellation prior to June 3, 1988. A fee of \$25 plus one-half the cost of tickets for specific events will be withheld for any cancellation received between June 3 and June 24, 1988.

No refunds will be given for cancellations received after June 24, 1988.

To obtain a refund, please return the **white official receipt** (not a copy) along with your written request. Refunds will be mailed **after** the Conference.

Telephone Contacts

Messages for delegates may be left at several numbers and will be forwarded to either the Conference registration desk or the Housing Office for those staying on campus. These numbers are:

- Conference Office: (604) 721-8465 (8:30 a.m. to 4:30 p.m.)
- Housing Office: (604) 721-8395 (7:30 a.m. to 12 midnight)
- Traffic & Security: (604) 721-7599 (24 hour service; reserved for emergencies)
- Conference Registration Desk (604) 721-8822 (Effective June 29-July 2)

For **ALL** Inquiries About the Meeting, Please Contact:

Mary Ransberry
Conference Services
University of Victoria
P.O. Box 1700
Victoria, B.C. Canada
V8W 2Y2

Phone: (604) 721-8465
Fax: (604) 721-8653
Telex: 049-7222
E-Mail: RASC@UVVM.BITNET

Preparing an Abstract

Please fill out the form on the other side of this sheet carefully; we will be preparing the final Conference program directly from the submitted abstract forms. A photocopy of the form is acceptable.

We ask that you use a standard elite typeface on a typewriter or printer or 12-point type on a laser printer. Please type single-spaced, and use a black carbon ribbon, letter-quality printer, or laser printer. Please avoid using dot-matrix printers if at all possible. Use only the space provided and do not go outside the borders. Please make all handwritten symbols with black ink.

The title should be all in caps and not indented (flush left). Skip a line after the title, and then indent the name and abbreviated affiliation of the author(s) three spaces. For oral papers, the name of the presenting author must be given first. Skip another line and begin the abstract flush left. If there is more than one paragraph in the abstract, skip a line between paragraphs.

Note for those giving amateur papers: you do not need to have an institutional affiliation to give a paper in the RASC/ASP/WAA Meeting. You may give an amateur club as your affiliation or simply not list an affiliation at all.

Abstracts that do not comply with these instructions may be rejected.

Sample format:

HOW THE HUBBLE CONSTANT CAN BE BOTH 50 AND 100.

A.R. Sandage (MWLCO) and G. de Vaucouleurs (U. of Texas)

Recent dramatic discoveries have enabled us and our co-workers to establish that, contrary to our previous papers,...

Please complete the form on the other side and send **before May 2, 1988** to:

RASC/ASP/WAA MEETING

Conference Services

University of Victoria

P.O. Box 1700

Victoria, B.C. Canada

V8W 2Y2

Phone (604) 721-8465

FAX: (604) 721-8653

Abstract Form

for the 1988 Joint Meeting of the RASC/ASP/WAA

(Exact format shown on instruction sheet must be followed)

Type of paper (Note: no contributed **oral** papers are planned for the Symposium on the Extragalactic Distance Scale but poster contributions are encouraged).

- Invited oral paper, Extragalactic Distance Scale Symposium
- Contributed poster paper, Extragalactic Distance Scale Symposium
- Invited oral paper, RASC/ASP/WAA paper session
- Contributed oral paper, RASC/ASP/WAA paper session (10 minutes maximum, including questions)
- Invited oral paper on history
- Contributed oral paper on history (15 minutes maximum, including questions)

List special audio-visual requirements or other special needs. (Note that 35 mm carousel projectors and overhead projectors are available in each room.) Indicate clearly if you are requesting your oral paper to be scheduled on a particular day, and we will strive to accommodate your request.

Name of speaker (or presenting author in the case of poster papers):

Address:

Telephone (Home): () _____ Business:() _____

UNIVERSITY OF VICTORIA MAP AND DIRECTORY



