

NATIONAL AERONAUTICS SPACE ADMINISTRATION  
GODDARD SPACE FLIGHT CENTER

IAU COLLOQUIUM NO. 123:  
OBSERVATORIES in EARTH ORBIT and BEYOND

Building 8 Auditorium  
GSFC, Greenbelt, MD 20771

April 24-27, 1990

AGENDA

MONDAY, APRIL 23, 1990

Registration and Reception at Holiday-Inn Greenbelt

TUESDAY, APRIL 24, 1990

Welcome

J. Townsend  
R. Bonnet

(I) CURRENT MISSIONS

HST (Boggess, A.)  
COBE (Mather, J.C.)  
GRANAT (Sunyaev, R.)  
Hipparcos (Perryman, M.)  
IUE (Kondo, Y.)  
GINGA (Makino, F.)  
MIR (Sunyaev, R.)  
Voyager (Holberg, J.B.)

(II) FUTURE MISSIONS

(A) X-RAY AND GAMMA-RAY MISSIONS

ROSAT (Trümper, J.)  
GRO (Kniffen, D.A.)

AXAF (Weisskopf, M.C.)  
 ASTRO-D (Tanaka, Y.)  
 XTE (Bradt, H.V.)  
 Spectrum-X (Sunyaev, R.)  
 XMM (Peacock, A.)  
 SAX (Scarsi, L.)  
 GAMMA-1 (Galper, A.)

*Reception at the Goddard Library*

WEDNESDAY, APRIL 25, 1990

(II) FUTURE MISSIONS (continued from April 24)

(B) ULTRAVIOLET MISSIONS

EUVE (Bowyer, S.)  
 Lyman-FUSE (Moos, W.)  
 SPECTRUM-UV (Steshenko, N.)  
 ORFEUS (Krämer, G.)

(C) INFRARED AND SUBMILLIMETER MISSIONS

SIRTF (Fazio, G.G.)  
 ISO (Cesarsky, C.)  
 IRTS (Matsumoto, T.)  
 FIRST (Frisk, U.O.)  
 Submillimeter Explorer, LDR (Phillips, T.G.)  
 SWAS (Melnick, G.J.)

(D) RADIO MISSIONS

Radioastron (Kardashev, N.)  
 IVS (Schilizzi, R.T.)  
 VSOP (Hirabayashi, H.)  
 VLBI with TDRSS (Linfield, R.P.)

(E) SOLAR SYSTEM & PLANETARY SYSTEMS

SOHO (Poland, A.I.)  
 OSL (Spicer, D.S.)  
 Planeten (Neukum, G.)  
 AIT (Levy, E.H.)

## (F) SHUTTLE-BORNE ASTRO MISSIONS

WUPPE (Code, A.D.)  
 HUT (Davidsen, A.)  
 UIT (Stecher, T.P.)  
 BBXRT (Serlemitsos, P.J.)

## (G) INTERPLANETARY MISSIONS

Interplanetary Probes - An Overview (Briggs, G.A.)  
 Ulysses (Page, D.E.)

## (H) DATA ANALYSIS ACTIVITIES

NASA Data Analysis Program (Riegler, G.R.)

*Banquet at the Goddard Recreation Center*

THURSDAY, APRIL 26, 1990(III) LAUNCH VEHICLES

## (A) CURRENT &amp; "NEAR" FUTURE

USA (Krause, R.B.)  
 USSR (Boyarchuk, M.)  
 ESA (Feustel-Buechler, J.)  
 Japan (Tanaka, Y.)

## (B) "LONG-TERM" FUTURE

Earth to Near-Earth Space (Keyworth, G.A.)  
 Deep Space Propulsion Systems (Stuhlinger, E.)

(IV) RELATIVE MERITS OF VARIOUS OBSERVATORIES

## (A) VARIOUS ORBITS AND SITES

Lagrangian-point behind the Moon (Strukov, I.)  
 Moon (Smith, Harlan)  
 Elsewhere (Illingworth, G.)

Panel:

Relative Merits of Low-Earth, Eccentric, Geosynchronous and Interplanetary Orbits and Sites in Space. (Farquhar, R.; Kardashev, N.; Mumma, M.; Oda, M.; Taylor, B.G.; Newton, G.; Smith, Harlan; Volonte,S.)

(B) ALTERNATIVE APPROACHES

Major Observatories vs. Economy Class Observatories in Space (Dyson, F.J.)

(V) LONG TERM FUTURE ISSUES

Panel:

Long Term Plans for Future Space Observatories(Bonnet, R.; Kardashev, N.; Longair, M.; Pellerin, C.; Tanaka, Y.)

*Dinner Reception at Martin's Crosswinds*

FRIDAY, APRIL 27, 1990

(V) LONG TERM FUTURE ISSUES (continued from April 26)

Panel:

Photon-Gathering Instruments and Detectors of the Future (Pounds, K.; Smith, H.; Humphries, C.; Gatley, I.; Illingworth, G.)

Panel:

Major Unsolved Problems of Astronomy (Arp, H.; Dyson, F.; Oda, M.; Hoyle, F.; Longair, M.; Sunyaev, R.)

Adjourn

*Posters were exhibited throughout the meeting*