



**National Aeronautics  
and Space Administration**

**January 31, 1998  
AO 98-OSS-02**

---

## **ANNOUNCEMENT OF OPPORTUNITY**

# **The Far-Infrared Space Telescope**

## **U.S. Participation in Flight Instruments and as Mission Scientists**

---

**Notice of Intent Due:  
Proposals Due:**

**February 16, 1998  
March 2, 1998**

OMB Approval No. 2700-0085

**The Far-Infrared Space Telescope:  
U.S. Participation in Flight Instruments and as Mission Scientists**

NASA Announcement of Opportunity  
Soliciting Research Proposals

AO 98-OSS-02  
Issued: January 31, 1998

Office of Space Science  
National Aeronautics and Space Administration  
Washington, DC 20546-0001

**The Far-Infrared Space Telescope:  
U.S. Participation in Flight Instruments and as Mission Scientists**

**Announcement of Opportunity**

Table of Contents

NASA Cover Letter to the ESA Announcement of Opportunity	1
Enclosure A: Cost Plan for U.S. Investigations	5
Enclosure B: General Instructions and Provisions	7
Enclosure C: Required Certifications	11

Appendix:

ESA FIRST/Planck Call for Proposals

## **OPPORTUNITY FOR NASA SUPPORT OF U.S. SCIENTIFIC INVESTIGATIONS ON THE ESA FAR-INFRARED AND SUB-MILLIMETRE TELESCOPE**

NASA is pleased to distribute to interested members of the U.S. scientific community the European Space Agency's (ESA's) Announcement of Opportunity (AO) for flight instruments for the Far-Infrared and Sub-millimetre Telescope (FIRST) Cornerstone mission. NASA endorses the scientific objectives and goals of this mission and is considering support of a modest degree of U.S. participation. This letter, together with the accompanying ESA AO, announces an opportunity for NASA support of scientific investigations by U.S. institutions as part of European instruments for FIRST. Participation is open to all categories of U.S. organizations, including industry, educational institutions, nonprofit organizations, NASA centers, and other Government agencies.

Note that the ESA AO requests proposals for participation in both the FIRST and Planck missions, whereas this parallel NASA solicitation is limited to participation in only the FIRST mission, since U.S. participants in Planck instruments were selected earlier this year. The full ESA AO package may be found on the World Wide Web at

**<http://www.estec.esa.nl/spdwww/first/html/aodocs.html> .**

NASA currently expects that funding for U.S. scientific participation in the FIRST program will be very limited and intends to fund only U.S. Co-Investigators (Co-I's) to European instrument proposals and U.S. Mission Scientists. At present, NASA is expecting to endorse no more than three such Co-I contributions in response to this opportunity and no more than two Mission Scientist proposals. For the purpose of this opportunity, proposers should assume that the total available amount for all funded collaborations in response to this AO will be \$25 million, spread approximately evenly over seven years and beginning in Fiscal Year 1999 (October 1, 1998), depending upon the availability of funds. Details of U.S. participation will be worked out by NASA with the national agencies in Europe and the selected European instrument teams, which will probably occur during the middle of 1998.

Proposals to ESA for hardware investigations involving U.S. participation will require advance endorsement by NASA to insure that ESA's selection is consistent with NASA's budgetary constraints and programmatic considerations. The successful proposers will be announced by ESA at the end of the review process in Europe.

This opportunity also allows individual U.S. scientists to propose for Mission Scientist positions with the FIRST program. NASA will also carry out a review of U.S. Mission Scientist proposals in advance of the ESA review.

Proposed investigations involving U.S. Co-Investigators (Co-I's) that require NASA support, as well as proposals for a Mission Scientist position, require submission of five copies of their complete proposals to the address below no later than 14 days following the ESA deadline of February 16, 1998, for receipt of proposals in Europe. Guidelines and additional information regarding the submission of a Cost Plan for U.S. investigations are provided in Enclosure A. Additional information relevant to U.S. proposers is provided in Enclosure B.

Notices of Intent from interested U.S. proposers may be sent electronically and should briefly summarize the likely nature of the intended proposal and the names of the U.S. proposers (to the extent known at the time of submission). These should be sent by February 16, 1998, to:

Dr. Harley Thronson  
Research Program Management Division  
Code SR  
NASA Headquarters  
Washington, DC 20546  
E-mail: [Harley.Thronson@hq.nasa.gov](mailto:Harley.Thronson@hq.nasa.gov)

Proposals are to be sent to:

FIRST Program Support Office  
Jorge Scientific Corporation  
Suite 700  
400 Virginia Avenue, SW  
Washington, DC 20024

In addition, one copy of the proposal must be forwarded to

Bettye Jones  
(AO 98-OSS-02)  
Science and Aeronautics Division  
Code IS  
NASA Headquarters  
Washington, DC 20546

The evaluation criteria to be used by NASA in identifying those proposals that it will endorse are given below and are similar to those stated in the ESA AO. Consequently, proposers do not need to produce a proposal for NASA that is different from that for ESA. However, proposers to NASA must include a short addendum of no more than five pages as a preface to the ESA proposal to identify unique features of the proposal that should be of interest to NASA for the purposes of the U.S. review and that also describes

in detail the contributions of the U.S. investigators to the proposal. This addendum is in addition to budget information necessary for the U.S. review (Enclosure A).

For instrument team proposals, the evaluation criteria to be used by NASA in determining its endorsements are as follows, where all criteria are approximately equal in weight:

1. The overall scientific merit of the proposed investigation by the combined European and U.S. instrument team and the probability of acquiring new scientific results as compared to those expected from other observatories that are expected to be operating during approximately the same time period. (These other observatories include the Space Infrared Telescope Facility [SIRTF], the Stratospheric Observatory for Infrared Astronomy [SOFIA], and various ground-based sub-millimeter facilities. Information on the performance of these NASA programs may be found on the World Wide Web at [<http://origins.jpl.nasa.gov>].) The U.S. addendum to the ESA proposal should briefly summarize data rights accruing to the U.S. investigators specifically as a result of the proposed collaboration.
2. The costs expected to bring the U.S. part of the proposed investigation to a satisfactory completion, a credible schedule that provides any instrumentation, software (if any), and documents that the proposal schedule is compatible with the FIRST schedule, and adherence to good management practices as exhibited in the management plan. (NASA and the peer review process will recognize that, at present, there is significant uncertainty in the FIRST/Planck schedule.)
3. The technological merit of any hardware that may be proposed by the U.S. collaborator, with particular regard to its ability to aid in supplying the data needed for the investigation. (NASA and the peer review will recognize that, at present, there is significant uncertainty in the FIRST/Planck design.)

Proposals to NASA for the position of Mission Scientist will be judged by the same criteria as in the ESA AO, in addition to reasonableness of the proposed budget and NASA's programmatic considerations.

Based upon the reviews by a panel of appropriately qualified peers of the U.S. proposers, NASA will determine which U.S. efforts to endorse for ESA's consideration. Written notification of this decision will be sent to the U.S. proposers at the same time. Proposals to NASA that are endorsed by NASA and selected by ESA will be funded by NASA through the issuance of a grant or a contract, as specified in Section A of the NASA Grant and Cooperative Agreement Handbook ([\[http://procure.msfc.nasa.gov/grcover.htm\]](http://procure.msfc.nasa.gov/grcover.htm)).

Lead proposers from U.S. institutions who are selected by NASA as Co-I's on successful European proposals will be considered by NASA as PI's for the purposes of NASA

funding and project management, even though such proposers may be Co-I's or team members by the ESA program office. Likewise, a NASA-endorsed U.S. Mission Scientist who is selected by ESA will be considered a PI by NASA for funding purposes. Successful and unsuccessful proposers will be contacted directly by the NASA Research Program Management Division.

The Space Science and Aeronautics Division will arrange with the non-U.S. sponsoring agency for the proposed participation on a no-exchange-of-funds basis, in which NASA and the non-U.S. sponsoring agency will each bear the cost of discharging their respective responsibilities. Depending upon the nature and extent of the proposed cooperation, these arrangements may entail (1) a letter of notification from NASA, and (2) an exchange of letters between NASA and the sponsoring governmental agency, or (3) a formal Agency-to-Agency Memorandum of Understanding (MOU).

Further questions relating to this opportunity for participation requiring NASA support in the FIRST mission should be addressed to Dr. Thronson at the address above. Your interest in applying to this opportunity is sincerely appreciated and solicited.

Alan N. Bunner  
Science Program Director  
Structure and Evolution of the Universe

Wesley T. Huntress, Jr.  
Associate Administrator  
for Space Science

## **Enclosure A**

### **Cost Plan for U.S. Investigations**

The cost plan should summarize the cost of the total investigation proposed to be borne by NASA by major categories of cost, as well as by function, and should be tabulated by U.S. Government fiscal year. Costs should be separately identified for the definition and development phases described in the European Space Agency Announcement of Opportunity. Costs should be further broken down into those associated with (a) development through launch plus 30 days, and (b) day 31 after launch through the end of the primary science program of FIRST, as defined by ESA. Note that this particular opportunity intends to support U.S. collaboration on FIRST only through launch plus 30 days. The second (b) section in a proposal is intended to assist NASA in long-range planning and is expected to be only approximate. Costing information should be provided in sufficient detail to enable NASA to judge the reliability of the cost estimate. All assumptions used in arriving at a cost estimate should be clearly identified. Cost figures should be expressed in 1998 dollars.

1. The categories of cost should include the following:

- (a) Direct labor - List by labor category, with man-hours and rates for each. Provide actual salaries of all personnel and the percentage of time each individual will devote to the effort.
- (b) Overhead - Include indirect costs, which, because of their incurrence for common or joint objectives, are not readily subject to treatment as a direct cost. Usually, such costs are in the form of a percentage of the labor direct costs.
- (c) Materials - This should give the total cost of the bill of materials, including estimated cost of each major item. Include lead time of critical items.
- (d) Subcontracts - List those over \$25,000 and specify the vendor and the basis for estimated costs. Include any baseline or supporting studies.
- (e) Special equipment - Include a list of special equipment and lead and/or development time.
- (f) Travel - List estimated number of trips, destinations, duration, purpose, number of travelers, and anticipated dates.
- (g) Other Costs - Costs not covered elsewhere.



(h) General and Administrative Expenses - This includes the expenses the institution's general and executive offices and other miscellaneous expenses related to the overall business.

(i) Fees - as applicable.

(j) Estimated costs of deliverables to the FIRST project in Europe.

## **Enclosure B**

### **Abridged FAR Supplement 1872.705-1: General Instructions and Provisions.**

#### **I. Instrumentation and/or Ground Equipment.**

By submitting a proposal, the investigator and institution agree that NASA has the option to accept all or part of the offeror's plan to provide the instrumentation or ground support equipment required for the investigation or NASA may furnish or obtain such instrumentation or equipment from any other source as determined by the selecting official. In addition, NASA reserves the right to require use, by the selected investigator, of Government instrumentation or property that becomes available, with or without modification, that will meet the investigative objectives.

#### **II. Tentative Selections, Phased Development, Partial Selections, and Participation with Others.**

By submitting a proposal, the investigator and the organization agree that NASA has the option to make a tentative selection pending a successful feasibility or definition effort. NASA has the option to contract in phases for a proposed experiment, and to discontinue the investigative effort at the completion of any phase. The investigator should also understand that NASA may desire to select only a portion of the proposed investigation and/or that NASA may desire the individual's participation with other investigators in a joint investigation, in which case the investigator will be given the opportunity to accept or decline such partial acceptance or participation with other investigators prior to a selection. Where participation with other investigators as a team is agreed to, one of the team members will normally be designated as its team leader or contact point.

#### **III. Selection Without Discussion.**

The Government reserves the right to reject any or all proposals received in response to this AO when such action shall be considered in the best interest of the Government. Notice is also given of the possibility that any selection may be made without discussion (other than discussions conducted for the purpose of minor clarification). It is therefore emphasized that all proposals should be submitted initially on the most favorable terms that the offeror can submit.

#### **IV. Treatment of Proposal Data.**

It is NASA policy to use information contained in proposals and quotations for evaluation purposes only. While this policy does not require that the proposal or quotation bear a restrictive notice, offerors or quoters should place the following notice on the title page of the proposal or quotation and specify the information, subject to the notice by inserting appropriate identification, such as page numbers, in the notice. Information (data) contained in proposals and quotations will be protected to the extent permitted by law, but NASA assumes no liability for use and disclosure of information not made subject to the notice. To prevent inadvertent disclosure, proposal data shall not be included in submissions (e.g. final reports) that are routinely released to the public.

#### **RESTRICTION ON USE AND DISCLOSURE OF PROPOSAL AND QUOTATION INFORMATION (DATA)**

The information (data) contained in [insert page numbers or other identification] of this proposal or quotation constitutes a trade secret and/or information that is commercial or financial and confidential or privileged. It is furnished to the Government in confidence with the understanding that it will not, without permission of the offeror, be used or disclosed for other than evaluation purposes; provided, however, that in the event a contract is awarded on the basis of this proposal or quotation the Government shall have the right to use and disclose this information (data) to the extent provided in the contract. This restriction does not limit the Government's right to use or disclose this information (data) if obtained from another source without restriction.

#### **V. Late Proposals.**

The Government reserves the right to consider proposals or modifications thereof received after the date indicated, should such action be in the interest of the Government.

#### **VI. Disclosure of Proposals Outside Government.**

NASA may find it necessary to obtain proposal evaluation assistance outside the Government. Where NASA determines it is necessary to disclose a proposal outside the Government for evaluation purposes, arrangements will be made with the evaluator for appropriate handling of the proposal information. Therefore, by submitting a proposal the investigator and institution agree that NASA may have the proposal evaluated outside the Government. If the investigator or institution desire to preclude NASA from using an outside evaluation, the investigator or institution should so indicate on the cover.

However, notice is given that if NASA is precluded from using outside evaluation, it may be unable to consider the proposal.

## **VII. Equal Opportunity (U.S. Proposals Only).**

By submitting a proposal, the investigator and institution agree to accept the following clause in any resulting contract:

### **EQUAL OPPORTUNITY**

During the performance of this contract, the Contractor agrees as follows:

(a) The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin.

(b) The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, or national origin. This shall include, but not be limited to, (1) employment, (2) upgrading, (3) demotion, (4) transfer, (5) recruitment or recruitment advertising, (6) layoff or termination, (7) rates of pay or other forms of compensation, and (8) selection for training, including apprenticeship.

(c) The Contractor shall post in conspicuous places available to employees and applicants for employment the notices to be provided by the Contracting Officer that explain this clause.

(d) The Contractor shall, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.

(e) The Contractor shall send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding the notice to be provided by the Contracting Officer, advising the labor union or workers' representative of the Contractor's commitments under this clause, and post copies of the notice in conspicuous places available to employees and applicants for employment.

(f) The Contractor shall comply with Executive Order 11246, as amended, and the rules, regulations, and orders of the Secretary of Labor.

(g) The Contractor shall furnish to the contracting agency all information required by Executive Order 11246, as amended, and by the rules, regulations, and orders of the Secretary of Labor. Standard Form 100

(EEO-1), or any successor form, is the prescribed form to be filed within 30 days following the award, unless filed within 12 months preceding the date of award.

(h) The Contractor shall permit access to its books, records, and accounts by the contracting agency or the Office of Federal Contract Compliance Programs (OFCCP) for the purposes of investigation to ascertain the Contractor's compliance with the applicable rules, regulations, and orders.

(i) If the OFCCP determines that the Contractor is not in compliance with this clause or any rule, regulation, or order of the Secretary of Labor, the contract may be canceled, terminated, or suspended in whole or in part, and the Contractor may be declared ineligible for further Government contracts, under the procedures authorized in Executive Order 11246, as amended. In addition, sanctions may be imposed and remedies invoked against the Contractor as provided in Executive Order 11246, as amended, the rules, regulations, and orders of the Secretary of Labor, or as otherwise provided by law.

(j) The Contractor shall include the terms and conditions of subparagraph 1 through 9 of this clause in every subcontract or purchase order that is not exempted by the rules, regulations, or orders of the Secretary of Labor issued under Executive Order 11246, as amended, so that these terms and conditions will be binding upon each subcontractor or vendor.

(k) The Contractor shall take such action with respect to any subcontract or purchase order as the contracting agency may direct as means of enforcing these terms and conditions, including sanctions for non-compliance; provided, that if the Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of direction, the Contractor may request the United States to enter into the litigation to protect the interests of the United States.

### **VIII. Patent Rights.**

(a) For any contract resulting from this solicitation awarded to other than a small business firm or nonprofit organization, the clause at 1852.227-70, "New Technology," shall apply. Such contractors may, in advance of contract, request waiver of rights as set forth in the provision at 1852.227-71, "Requests for Waiver of Rights to Inventions."

(b) For any contract resulting from this solicitation awarded to a small business firm or nonprofit organization, the clause at FAR 52.227-11, "Patent Rights--Retention by the Contractor (Short Form)" (as modified by 1852.227-11), shall apply.

## **Enclosure C**

---

### **CERTIFICATIONS**

---

A copy of the proposing institution's annual Civil Rights Certification form must be provided.

---

**CERTIFICATION REGARDING DRUG-FREE WORKPLACE REQUIREMENTS**

---

This certification is required by the regulations implementing the Drug-Free Workplace Act of 1988, 34 CFR Part 85. Subpart F. The regulations, published in the January 31, 1989 Federal Register, require certification by grantees, prior to award, that they will maintain a drug-free workplace. The certification set out below is a material representation of fact upon which reliance will be placed when the agency determines to award the grant. False certification or violation of the certification shall be grounds for suspension of payments, suspension or termination of grants, or government-wide suspension or debarment (see 34 CFR Part 85, Sections 85.615 and 85.620).

**I. GRANTEES OTHER THAN INDIVIDUALS**

- A. The grantee certifies that it will provide a drug-free workplace by:
- (a) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance is prohibited in the grantee's workplace and specifying the actions that will be taken against employees for violation of such prohibition;
  - (b) Establishing a drug-free awareness program to inform employees about --
    - (1) The dangers of drug abuse in the workplace;
    - (2) The grantee's policy of maintaining a drug-free workplace;
    - (3) Any available drug counseling, rehabilitation, and employee assistance programs; and
    - (4) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;
  - (c) Making it a requirement that each employee to be engaged in the performance of the grant be given a copy of the statement required by paragraph (a);
  - (d) Notifying the employee in the statement required by paragraph (a) that, as a condition of employment under the grant, the employee will
    - (1) Abide by the terms of the statement; and
    - (2) Notify the employer of any criminal drug statute conviction for a violation occurring in the workplace no later than five days after such conviction;
  - (e) Notifying the agency within ten days after receiving notice under subparagraph (d) (2) from an employee or otherwise receiving actual notice of such conviction;
  - (f) Taking one of the following actions, within 30 days of receiving notice under subparagraph (d) (2), with respect to any employee who is so convicted --
    - (1) Taking appropriate personnel action against such an employee, up to and including termination; or
    - (2) Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or Local health, Law enforcement, or other appropriate agency;
  - (g) Making a good faith effort to continue to maintain a drug-free workplace through implementation of paragraphs (a), (b), (c), (d), (e), and (f)
- B. The grantee shall insert in the space provided below the site(s) for the performance or work done in connection with the specific grant:
- Place of Performance (Street address, city, county, state, zip code)

-----  
-----  
-----  
-----

Check ☐ if there are workplaces on file that are not identified here.

**II. GRANTEES WHO ARE INDIVIDUALS**

The grantee certifies that, as a condition of the grant, he or she will not engage in the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance in conducting any activity with the grant.

---

Organization Name

AO or NRA Number and Title

---

Printed Name and Title of Authorized Representative

---

Signature

Date

---

Printed Principal Investigator Name

Proposal Title

---

**CERTIFICATION REGARDING  
DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS  
PRIMARY COVERED TRANSACTIONS**

---

This certification is required by the regulations implementing Executive Order 12549, Debarment and Suspension, 14 CFR Part 1265.

- A. The applicant certifies that it and its principals:
- (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
  - (b) Have not within a three-year period preceding this application been convicted or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or Local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
  - (c) Are not presently indicted for or otherwise criminally or civilly charged by a government entity (Federal, State, or Local) with commission of any of the offenses enumerated in paragraph A.(b) of this certification;
  - (d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State, or Local) terminated for cause or default; and
- B. Where the applicant is unable to certify to any of the statements in this certification, he or she shall attach an explanation to this application.
- C. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lowered Tier Covered Transactions (Subgrants or Subcontracts)
- (a) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principles is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any federal department of agency.
  - (b) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

---

Organization Name

---

AO or NRA Number and Title

---

Printed Name and Title of Authorized Representative

---

Signature

---

Date

---

Printed Principal Investigator Name

---

Proposal Title



---

### **Certification Regarding Lobbying**

---

- (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- (3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000, and not more than \$100,000 for each such failure.

---

Organization Name

AO or NRA Number and Title

---

Printed Name and Title of Authorized Representative

---

Signature

Date

---

Printed Principal Investigator Name

Proposal Title

## **ESA FIRST/Planck Call for Proposals**

Dear Sir/Madam,

I hereby invite the scientific community to submit proposals in response to the Announcement of Opportunity (AO) for participation in the Far Infra-Red Space Telescope (FIRST) and Planck missions. FIRST, ESA's fourth cornerstone in the Horizons 2000 plan, is an observatory-class mission to investigate the Universe and the planets in the far infra-red and sub-millimetre wavelength band. Planck, formerly known as Cobras-Samba, is the third medium sized mission of Horizons 2000. Planck is a Principal Investigator (PI)-type project designed to study the anisotropies of the Cosmic Microwave Background radiation.

Proposals, requested by **16 February 1998**, are solicited for the following:

### **For FIRST**

- Scientific instruments and associated Instrument Control Centres (ICC) | Principal Investigators (PI)
- Mission scientists positions

### **For Planck**

- Scientific Instruments and associated Data Processing Centres (DPC) | Principal Investigators (PI)

This call is open to candidates from ESA Member States and from the United States of America, in accordance with the ESA/NASA agreement on the principle of reciprocity.

As described in the Announcement of Opportunity proper, the baseline concept, presently under industrial study, consists of a single spacecraft accommodating both the FIRST and Planck instrument complements and PI proposals are solicited for this baseline. Parallel studies of separate FIRST and Planck missions are also being carried out to provide the information necessary to decide on the final mission option to be implemented.

Results of all these studies will be evaluated in Spring 1998. The final option will be approved by SPC in May 1998, taking due account of a strict financial limit.

In parallel, the instrument proposals will be evaluated, leading to the preselection of the PIs and the instruments by SPC, also in May 1998.

If FIRST and Planck have to be implemented as independent missions, any necessary changes will have to be agreed between ESA and the preselected PIs, with due account given to the resulting technical and programmatic constraints of the two single projects at the time of approval by SPC.

In any case, the final payload complements will be confirmed by SPC not later than **February 1999**.

The full AO package will be available in PDF format for downloading from:

**<http://www.estec.esa.nl/spdwww/first/html/first.html>**

as from October 3, 1997.

For those not having access to the Internet, a paper copy may be requested from the ESA FIRST/Planck Project Office, at the address given below:

F. Felici  
ESTEC / PT  
P.O. Box 299  
NL-2200 AG Noordwijk  
Netherlands

The proposals for the FIRST Mission Scientist positions, fully completed according to the instructions in the AO must reach the FIRST Project Scientist by **18 February 1998** at the latest at the following address:

G. Pilbratt  
ESTEC / SA  
P.O. Box 299  
NL-2200 AG Noordwijk  
Netherlands

A briefing meeting for prospective proposers will be held on **3 December 1997** at ESTEC, Noordwijk, The Netherlands.

In preparation for this meeting, written questions should be sent to the FIRST/Planck Project Office by **31 October 1997** (Fax +31 / 71 565 5244).

The planning for submission of proposals and the subsequent selection cycle is as follows:

Release of AO	3 October 1997
Submission of questions for briefing	31 October 1997
Clarification meeting	3 December 1997
Proposals due	16 February 1998
Evaluation phase	February to May 1998
Completion of selection process	28 May 1998
Final confirmation of Instruments	February 1999

Yours sincerely,

Dr. R.M. BONNET  
Director  
Scientific Programme