JOB VACANCY ANNOUNCEMENT

- **Associate Professor, National Astronomical Observatory of Japan (NAOJ)**

The National Astronomical Observatory of Japan (NAOJ) invites applications for an Associate Professor who will lead the research and development of heterodyne receivers at millimeter/submillimeter wavelengths to be installed into various telescopes including ALMA, and who will perform key System Engineering tasks in the planning of ALMA Development. Applications are expected from experts in the related fields.

1. Job Title: Associate Professor, one position
2. Division and Location: The Advanced Technology Center (ATC), NAOJ, Mitaka, Tokyo 181-8588, Japan
3. Area of Expertise: Applied physics, Electric/Electronic Engineering, System Engineering, and/or Radio Astronomy

4. Job Description:

The National Astronomical Observatory of Japan (NAOJ) has been playing a key role in the forefront of astronomical research worldwide, as demonstrated in the construction and operation of large-scale astronomical facilities such as Subaru Telescope, ALMA, and TMT (Thirty-Meter Telescope) as well as in the development of space-based instruments such as Hinode Satellite for solar observation, in the effort to promote cutting-edge astronomy utilizing these advanced telescopes. The NAOJ Advanced Technology Center (ATC), the research center for advanced technology development to support these important astronomical programs, has been producing successful results in the development of various astronomical instruments.

We invite applications for an Associate Professor position at the ATC. This position is for a person who will work as a research staff at the ATC to develop the next-generation heterodyne receivers at millimeter and submillimeter wavelengths for the future radio astronomical programs such as ALMA2 project, and will also provide key System Engineering expertise for future ALMA development. According to top-level science requirements as shown in the ALMA Development Roadmap, the successful candidate is expected to lead research and development of unprecedented receivers with ultra-low noise performance corresponding to the quantum noise, ultra-wide band in both RF and IF, multi-pixels, and so on, which are not on extension of conventional technologies. Another important responsibility of this position is to lead the execution of ALMA upgrades, new proposals and implementations of the next-generation of receivers and other hardware sub-systems to enhance the capability of the current ALMA telescope, providing Systems Engineering expertise to the NAOJ ALMA Project. He/she is

expected to contribute to the international planning of ALMA Development, through participation in review meetings and Working Groups. Fostering of young scientists, engineers and technicians including PhD's students is also required as part of the responsibility. The selected candidate will be employed as an Associate Professor at the NAOJ ATC, but may possibly transferred to other divisions related to ALMA or others.

As required qualifications for this position, applicants are expected to have a wide range of experience and skills in the field of radio astronomy and instrumentation, and have leadership and system engineering ability to strongly promote astronomical research and development keeping up with the demands of the times.

5. Terms of Appointment:

The candidate should be able to start as soon as possible after the job offer has been accepted.

The term of the contract will continue up to the end of the Japanese academic year in which the professor reaches NAOJ's mandatory retirement age of 65.

6. Minimum Educational Requirements:

(1) Ph.D. or equivalent; and

(2) To have achieved internationally recognized research results in the field of expertise, through peer-reviewed publications in relevant journals

(3) To have experience as the lead or as a key member of a development team for a large-scale astronomical project will be highly evaluated

7. Required Application Materials: (*To be prepared in English. Any other language will not be accepted.)

(1) A cover letter;

(2) A curriculum vitae;

(3) Publications list (Separate refereed and non-refereed papers. SPIE can be included in refereed papers.);

(4) A summary of your past research activities including international collaborations;

(5) Your commitment and plan to fulfill the duties (including your research plan as needed);

(6) Your contact easily reachable (e-mail and phone), and the email address of your current supervisor or line manager.

(7) Three or more reference letters; Note that your current supervisor or line manager cannot be your reference. Please ask your reference to send a letter as an e-mail attachment to the submission address shown in 9. (1). Applicants are responsible for ensuring that the letters arrive before the application deadline. (Reference letters should be written by faculty/staff

with tenured positions, and no more than one reference letter will be accepted from the same country.)

8. Application Deadline: 2019-08-30, 17:00 (Japan Standard Time)

9. Submission:

(1) Email your application documents to;
(E-mail address): apply-atc-assocprof20190830_AT_nao.ac.jp (replace _AT_ with @)
(Subject of e-mail): “Application for Associate Professor position of Radio Astronomy and Instrumentation”.

(2) If you have any question, contact;
(E-mail address): y.uzawa_AT_nao.ac.jp (replace _AT_ with @)
Prof. Yoshinori Uzawa, Director of Advanced Technology Center, NAOJ

10. Notes for Application:

- Convert each application documents (from 7.(1) through 7.(6) above) into separate PDF files and attach them to your e-mail.
- Make PDF files with appropriate resolution so that they won’t be too large (file size: up to 10 MB)
- Upon receipt of your application, you will receive a confirmation e-mail. If you do not receive any response from NAOJ within 3 working days, please contact; (E-mail address): apply-atc-assocprof20190830_AT_nao.ac.jp (replace _AT_ with @)
- Candidates selected in the final short list may be interviewed by the selection committee either via internet or face-to-face. The expense for the interview will not be covered by NAOJ.
- When the selection committee deems that there is no qualified candidate for this position, it is possible no one will be selected.

11. Remarks

- The NAOJ Advisory Committee for Research and Management will make the final decision for the appointment.
- Policy for Equal Employment Opportunity: Abiding by the Equal Employment Opportunity Act for Men and Women, NAOJ is committed to the realization of a society with gender equality. If two candidates are deemed equal in their performance evaluation, NAOJ will take positive action to employ women. For details, see http://open-info.nao.ac.jp/danjokyodo/