

## **JOB VACANCY ANNOUNCEMENT**

### **Tenure Track Assistant Professor, National Astronomical Observatory of Japan (NAOJ)**

NAOJ announces tenure track assistant Professor positions for researchers with statistical knowledge who lead Astroinformatics and Astrostatistics in NAOJ.

1. Job Title: Tenure track Assistant Professor, two positions

2. Division and Location: Research Enhancement Strategy Office, NAOJ

Location: Institute of Statistical Mathematics, Tachikawa Tokyo 190-8562, Japan as an assistant professor in the first five years and then NAOJ Mitaka, Tokyo 181-8588, Japan as one associate professor in the following years if the tenure-track review passes.

3. Area of Expertise: Astroinformatics, Astrostatistics, and/or related fields

4. Job Description:

In astronomy in the 21st century, thanks to the advent of new astronomical instruments such as Hyper Suprime-Cam (HSC), astronomical data have drastically increased. Huge imaging, spectroscopic and multivariate datasets are emerging and are stored in the archive system as big data. At the same time, computer power on astronomical simulation are vastly progressing as well. In order to derive scientific insights in this era, one requires methodology of statistics and informatics including Bayesian inference, data mining, machine learning, and so on. The field so-called astrostatistics or astroinformatics has been rapidly expanding in the last decade to enrich astronomy.

These are positions for researchers who have already used astrostatistics and astroinformatics to research various topics using clustering, density estimation, multivariate classification, false discovery rate, time series with lag and so on. The two successful candidates will stay in Institute of Statistical Mathematics (ISM) in the first 5 years. During her/his stay in ISM, they are expected to develop the astrostatistics and astroinformatics in Japan not only to carry out cutting-edge researches but also to provide worthwhile scientific outcomes.

The two successful candidates are also expected to explore the frontier of astrostatistics and astroinformatics and as a result to become a world leading scientist in the field. Such acquired knowledge and expertise on astrostatistics and astroinformatics will influence various fields of astronomy and may build the new cross-disciplinary field(s) for further advancement of astronomy. Either of them who passes in the tenure-track review will be relocated to NAOJ as an associate professor and be expected to lead research with

astrostatistics and astroinformatics, to transfer acquired knowledge and expertise to NAOJ colleagues, and to cultivate young scientists who will lead as next-generation front runner.

5. Terms of Appointment: 5 years. The two successful candidates are reviewed at the third year and the fifth year for approval of one tenure position of an associate professor. After that, either of them will continue up to the end of the Japanese academic year in which the associate professor reaches NAOJ's mandatory retirement age of 65. The unseated candidate is allowed to extend his/her contract of up to one year as a project assistant professor for next job search. In any case, the candidates are not allowed work under NINS for more than 10 years, so you are not allowed to apply this position if you have already worked for NINS for more than 5 years right before starting this position. In addition, if the successful candidate had been employed as an NINS employee after 2013 April 1, the term of the project assistant professor may be set so that the total accumulated period of employment does not exceed ten years.

6. Minimum Academic Requirements:

- (1) Ph.D. or equivalent in astronomy, in statistics and informatics, or related fields;
- (2) Willingness to learn modern statistics and informatics;
- (3) Capability to join, discuss and collaborate between ISM and NAOJ;

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

- (1) Cover letter;
- (2) Curriculum vitae;
- (3) Publications list (Separate refereed and non-refereed papers);
- (4) Summary of your past research activities including application of statistics and informatics;
- (5) Your plans to fulfill the responsibilities and aspirations for the position (including your research plan as needed);
- (6) Your easily reachable contact information (e-mail and phone) and the e-mail address of your current supervisor or line manager.
- (7) Five or more reference letters. Note that your current supervisor or line manager cannot serve as a reference. Please ask your references 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 two reference letters will be accepted from each country.)

8. Application Deadline: 2019 November 29, 17:00 (Japan Standard Time)

9. Submission:

(1) E-mail your application documents to:

(E-mail address) apply-tenuretrack-assitprof20191129\_AT\_nao.ac.jp (replace \_AT\_ with @)

(Subject of e-mail) “Application for NAOJ Astroinformatics”

(2) Contact for Inquiries:

(E-mail address) apply-tenuretrack-assitprof20191129\_AT\_nao.ac.jp (replace \_AT\_ with @)

Masao, Saito, NAOJ Director of Research Coordination

Inquiries on ISM, statistics, or informatics will be transferred to ISM researchers.

10. Notes for application:

· Convert each application documents (from 7.(1) through 7.(6) above) into a separate PDF file and attach them to your application 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-tenuretrack-assitprof20191129\_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 travel to the interview will not be covered by NAOJ.

· If the selection committee deems that there is no qualified candidate for this position, it is possible no one will be selected.

11. Remarks

· Probation period : 6 months

· 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/>