

## Announcement – ADC/NAOJ Project Research Fellow

Astronomy Data Center (ADC), National Astronomical Observatory of Japan (NAOJ) is inviting applications for one position of project research fellow.

Astronomy Data Center (ADC) of the National Astronomical Observatory of Japan (NAOJ) is operating open-use computer systems for astronomical data analysis and providing data archive systems with astronomical databases for delivering observational data to support astronomical activities in the world.

ADC is hosting data archive servers for raw and science-ready data obtained with Hyper Suprime-Cam (HSC) at Subaru Telescope. The archive service also provides functions for fast data searching/retrieving, which are useful for performing sciences using HSC data. We are developing science applications based on a next generation database management system (DBMS) which is capable of serving even larger data sets than the existing DBMS does. This new DBMS will enable astronomers to effectively extract information of celestial objects and to pursue cutting-edge sciences based on such “Big Data”. Our role is to implement astronomical applications on it, and test/evaluate the functions/performance. We also plan to promote astronomical researches by using the huge astronomical catalogs stored in the new DBMS.

1. Number of vacancies: one
2. Duty station is Astronomy Data Center, NAOJ in Mitaka, Tokyo
3. Project research fellow is a full-time position (discretionary work type: standard work hours is 38h45min working hours/week) employed under the scheme of the annual salary system of National Institutes of Natural Sciences (NINS, <http://www.nins.jp/>: Japanese only)※.  
※ NAOJ is one of the institutes which constitute NINS.
4. A successful candidate is expected to work on the duties for data preparation for storing data into databases, developing the software for quick/fast search of large astronomical catalogs, especially for HSC object catalogs generated for individual exposures, and promoting researches by using the databases, such as studying variable objects and/or more accurate photometric/astrometric calibrations and so on. The duties also include improvement and/or optimization work for the proto-type database system, by testing and evaluating its functions and performance.
5. The applicant should have experience of programming on a UNIX-based computer system using computer languages such as Python, and of researches in astronomy or related fields and/or data science. Experience of programming with a relational databases/data scientific approach are preferable.
6. (1) The term starts as soon as reasonably possible after April 1, 2020. The term includes the probation period of six months.  
(2) The term continues up to the end of March 2021, subject to annual review. ※  
At the end of the contract term, there is a possibility of extending the contract up to another two years, based on a review and available budget. ※  
※ If the applicant had been the project research fellow of NAOJ or the Researcher (Part-time Contract

Employee) before, then the term may be adjusted so that the total length of employment does not exceed five years.

7. The applicant must have a PhD degree.
8. The application documents (either in Japanese or in English) must include
  - (1) a curriculum vitae,
  - (2) a summary of research activities in the past,
  - (3) a list of publications (Separate refereed and non-refereed papers. For co-authored papers, list all the names of authors.),
  - (4) an outline of research plans. The description on aspiration and/or skill/experience useful for the duties should be included in the document. Please add the information about when you can start the job.
  - (5) One letter of reference, to be uploaded directly from the person reviewing the applicant to an NAOJ job application system shown in 10 before the deadline. Applicants are responsible for ensuring that the letters are submitted before the application deadline. The name of the person should be identified in the application cover letter.
9. The application documents and the reference letter must be uploaded no later than 17:00 of 14 February 2020(JST).
10. Applicants are required to apply via the NAOJ job application system on the web:

<https://jobregister.nao.ac.jp/>

Please fill out the form on the web and upload the documents specified on the application form. If it takes time to prepare the documents, applicants should be issued an applicant ID and reference ID in advance. Reference letters should be uploaded by persons who have written the letter for you directly, following the instruction shown on the application form. The reference ID and the password are required to upload a reference letter, so please inform your reference of the issued reference ID and password. The application documents should be converted to PDF (max 50MB each, 100MB in total, at most 10 files). For inquiries on the job description, please contact

Hisanori Furusawa,

Astronomy Data Center, NAOJ

e-mail: furusawa.hisanori <AT>nao.ac.jp (replace <AT> with @)

Subject of e-mail: "Inquiries on Project Research Fellow of NAOJ Astronomy Data Center"

For Inquiries on the NAOJ job application system or other items, contact;

E-mail: JobRegister-contact-10\_AT\_nao.ac.jp (replace \_AT\_ with @)

Subject of e-mail: "Inquiries on Project Research Fellow of NAOJ Astronomy Data Center"

11. The fellow will receive a monthly salary of 350,000 JPY plus compensation for commuting expenses (up to 55,000 JPY per month). Social insurance will be applied. Bonus and retirement allowances are not provided. The travel and relocation costs to NAOJ will be covered, subject to the travel regulations of NINS (the details have to be arranged with the administration office).
12. - 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/>

- Information submitted in your application documents will not be used for any purpose other than the selection process and for contacting you with necessary notices in connection with the selection. Once the selection process is complete, we will securely dispose of all application documents and personal information, except for those submitted by the successful candidate.