

Announcement – ADC/NAOJ Project Research Fellow

Astronomy Data Center (ADC), National Astronomical Observatory of Japan (NAOJ) is inviting applications for two positions 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 also 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 have recently participated in a new project formed by an academia-industry collaboration, that develops 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: two
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. Successful candidates are 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 also 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 will be preferable.
6. (1) The term starts as soon as reasonably possible after October 1, 2019.
(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) PDF copy of three major publications,
 - (5) 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.
 - (6) One letter of reference, to be sent directly from the person reviewing the applicant. The name of the person should be identified in the application cover letter.
9. The application documents and the reference letter must be received no later than 17:00 of 13 September 2019(JST). We will close the recruitment after finding out the right persons for the job.
10. The email addresses for the application and inquiries are
 - (1) Application documents and one letter of reference should be sent to:
tadafumi.takata<AT>nao.ac.jp (replace <AT> with @)
With a mail subject of "Application for ADC Project Research Fellow".
 - (2) For inquiries on the job description, please contact
Hisanori Furusawa,
Astronomy Data Center, NAOJ
Osawa 2-21-1, Mitaka, Tokyo 181-8588, Japan
e-mail: furusawa.hisanori <AT>nao.ac.jp (replace <AT> with @)
11. When the application documents are received, a confirmation mail will be sent to the applicant. If you do not receive the confirmation within three working days, please notify the inquiry address.
12. 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).
13. 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/>