

PFS Project Research Fellow at the Subaru Telescope

The Subaru Telescope is developing a next-generation fiber spectrograph with very high multiplexity in collaboration with other facilities. This new instrument is called Prime Focus Spectrograph (PFS) and is expected to start its science operation in 2021. The instrument will observe a wide variety of objects to address a wide range of scientific questions. Due to the complexity of the instrument and also for efficient scientific exploration of the data, the processing of the raw data from PFS has to be fully automated regardless of the nature of the targets. The processing pipeline is still in the early phase of the development and the observatory is seeking an experienced researcher to play a key role in the pipeline development at the National Astronomical Observatory of Japan (NAOJ) with an emphasis on the sky subtraction and flux calibration.

The successful candidate will join the PFS collaboration, a vibrant environment for both scientific and technical researchers. The candidate will also join the HSC collaboration and can fully exploit the excellent data set from the on-going 300-night survey. The candidate is expected to spend up to 50% of his/her time for the pipeline work and the remaining time for his/her own research. The research proposal should include plans for both.

【Job Title】 Specially Appointed Research Employee,
Project Research Fellow (Software engineer for PFS pipeline development)

【Division】 Subaru Telescope, National Astronomical Observatory of Japan

【Work Location】 2-21-1 Osawa, Mitaka, Tokyo, Japan

【Responsibilities and Tasks】

- Development of data processing software for PFS on the Subaru Telescope
- Development of software tools and libraries for scientific exploration of processed PFS data
- Coordination of international software development work

For details of PFS, refer to <http://pfs.ipmu.jp/instrumentation.html>

【Employment】

- (1) Starting date : As soon as reasonably possible after selection
- (2) Duration of Employment : 3 years (subject to annual review)

At the end of the contract term, there is the possibility of extending the contract up to two years, based on a review.

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.

【Qualifications】

- PhD in astronomy or in a related field
- Experience in software development in C++ and Python
- Good communication skills in English
- Knowledge and experience in numerical calculations

【Work Type】 Discretionary Work

【Standard Working Hours】 5 days a week (Monday – Friday) , 8:30 (start) ~ 17:15 (finish)

【Salary and Benefits】

Salary: Annual Salary System

•The fellow will receive a monthly salary of 350,000 JPY plus compensation for commuting expenses (up to 55,000JPY per month), and annual research funds of 500,000 JPY. The travel and relocation costs to NAOJ will be covered, subject to the travel regulations of NINS (the details need to be arranged with the Administration Office).

Insurance: Health Insurance, Pension Insurance, Unemployment Insurance, Industrial Accident Insurance

Holidays: Saturdays, Sundays, Japanese National Holidays, End-New Years' Holiday

Leave: Annual Leave, Summer Vacation, etc.

【Application Documents】

- (1) Curriculum vitae with a photograph
- (2) Brief summary of the past and on-going research (include software development work here)
- (3) Publication list (include the full information; paper title, list of authors, journal name and volume and page numbers, and year of publication. Separate refereed and non-refereed papers)
- (4) Research proposal during the fellowship
- (5) Names and contact addresses of two references

【Application Deadline】 5pm on September 28, 2018(JST)

【Submission】 To: National Astronomical Observatory of Japan

Email: pfspipe2018apply_AT_aoj.org

Please replace "_AT_" with @. (The same hereinafter)

Email subject should be "Application for Software engineer for PFS"

【Inquiries】 (Inquires About Application Process)

Personnel Section, General Affairs Division, NAOJ Administration Department

E-mail : apply-qa_AT_aoj.ac.jp

(Inquires About Duties)

Dr. Masayuki Tanaka

E-mail: masayuki.tanaka_AT_aoj.ac.jp

【Notes】

- Application documents are used for the purpose of this recruitment only.
- NAOJ will not cover travel expenses for the interview.
- A confirmation email will be sent upon receipt of your application. If you do not receive it within 3 working days, please contact masayuki.tanaka_AT_aoj.ac.jp

【Remarks】

NAOJ is an equal opportunity institute dedicated to build a broad and inclusive staff.

For further details, please refer to : <http://open-info.aoj.ac.jp/danjokuyodo/>