



Krakow, February 26, 2024


The Henryk Niewodniczański Institute of Nuclear Physics Polish Academy of Sciences

announces a competition for the position

ADIUNKT /post-doc/ - AP-NZ42-1/24

in Department of Particle Physics /NZ42/

Division of Theoretical Physics /NO4/.

Deadline for application :	Expected term of employment:	Type of contract:	Number of positions:	Application address:
May 15th 2024	Second half of 2024 for define period up to 33 Months	contract of employment, full-time at IFJ PAN as the only place of work	1	 jobs@ifj.edu.pl

<https://www.ifj.edu.pl/en/career/recruitment-procedures.php>

I. Keywords:

Quantum Chromodynamics, perturbative calculations, Feynman integrals

II. Description:

A person employed as an adjunct (post-doc) for a definite period up to 33 months at the Department of Particle Physics - NZ42 at IFJ PAN will be obliged to participate in the work on research topics and projects implemented and planned for the nearest period at the NZ42 Department.

The basic tasks of the employed person will include theoretical calculations of components of higher order corrections of cross sections within perturbative Quantum Chromodynamics. The above will involve, in particular, analytical calculations of integrals appearing in real and virtual contributions to the cross sections.

The employed person will also be obliged to disseminate the results of research in the form of publications in leading scientific journals indexed in the JCR and speeches during seminars and conferences, including international ones. This person will also be obliged to apply for external funding for research.

III. Required qualifications:

- doctor degree in theoretical high energy physics,
- qualifications necessary to carry out research tasks at NZ42,
- experience in computations in the realm of perturbative Quantum Chromodynamics,
- scientific achievements documented by publications in prestigious international scientific journals,
- good knowledge of Mathematica and C++,
- very good knowledge of spoken and written English.

Welcome:

- experience in calculations of Feynman integrals,
- experience with tools for IBP reduction,
- familiarity with Python.

IV. Salary offered

A person employed for a fixed period up-to 33 Months as an adjunct (post-doc) will receive a monthly basic remuneration from **PLN 5,500.00 gross**, which depends on the candidate's achievements. The total amount of remuneration will be increased by **allowances** for: length of service and working under conditions of exposure to ionizing radiation (if applicable).

V. General information

Detailed rules of the competition are specified in the Terms and Conditions of Recruitment of Adjuncts and Research Assistants adopted by the IFJ PAN Scientific Council on April 12, 2021 and accessible at:

<https://www.ifj.edu.pl/en/career/documents/terms-and-conditions-adjunct-research-assistant.pdf>

Candidates applying for employment in IFJ PAN are required to contact the head of the NZ42 Department, prof. Krzysztof Kutak at an early stage, who may ask the candidate to deliver a seminar before submitting the application and then the Head of the Department submits employment recommendation to the Competition Committee.

VI. Required documents

The list of required documents is included in the rules of the competition:

<https://www.ifj.edu.pl/en/career/documents/terms-and-conditions-adjunct-research-assistant.pdf>

VII. Deadline for application submission

- Applications with attachments shall be sent by e-mail by **May 15th, 2024** to the following address: jobs@ifj.edu.pl with the note „**Adiunkt/post-doc/AP-NZ42-1/24**”
- The employment recommendation from the two referees shall be sent directly, bypassing the candidate, to the following e-mail address: jobs@ifj.edu.pl

VIII. Conclusion of the competition

- Interviews with candidates shall take place from **June 10th, to June 12th, 2024**. Candidates qualified for interviews shall be notified by e-mail about the exact date of the Interview **by May 24th, 2024**. During the interview the candidate shall be required to give a presentation, **stored on a pen drive**, lasting 10 minutes at maximum which shall presenting candidate's most important achievement,
- The competition shall be concluded **by June 28th, 2024**.
- Each candidate shall be notified by e-mail about the results of the competition.
- **The final decision on employing and salary shall be taken by IFJ PAN Director.**

IX. Contact

All questions can be sent by e-mail to the IFJ PAN Employment Department (jobs@ifj.edu.pl).