

Postdoc Position in the NCN project
Interaction in Quantum Field Theory
(Principal Investigator: Wojciech Dybalski)

Applications are welcome for a postdoc position at the Department of Mathematics and Computer Science of the Adam Mickiewicz University of Poznań (UAM). The appointment is for 3 years with a possible extension by 2 more years, the salary is competitive.

The successful candidate will work in the area of mathematical foundations of Quantum Field Theory. He/she will analyse the problem of interaction from constructive and axiomatic perspectives. On the axiomatic side the project will build on recent advances in scattering theory to formulate criteria for non-triviality of the scattering matrix. On the constructive side the focus of the project is on models with non-polynomial interaction potentials. They will be treated using recent advances in stochastic quantization among other methods.

Qualification requirements:

The candidates should have a PhD in mathematics, mathematical physics or theoretical physics, obtained not earlier than 7 years before the prospective employment in the project (exceptions due to maternity apply). The candidates are expected to have a strong interest in Quantum Field Theory as well as experience in this subject; for example, in integrable models of QFT or in QFT on curved spacetime. Strong background in some of the following fields is also advantageous: functional analysis, operator algebra, measure theory and probability, theory of renormalization.

The applications should include:

- Cover letter (max 2 pages). Should contain a description of the candidate's areas of interest and expertise related to the topic of the project, the main achievements, and an explanation how the applicant's background qualifies him for the position.
- CV.
- List of publications.
- A copy of one publication or thesis most relevant to the position.
- Contact information of two referees (name, relation to the candidate, e-mail). One referee should be the current or most recent employer.

Applications are welcome until the position is filled. Female candidates are encouraged to apply. To ensure full consideration the applications should be sent to the principal investigator (dybalski@ma.tum.de) by September 30, 2020. Interviews with the recruitment committee, chaired by the principal investigator, shall be held virtually in October 2020. The position should start in November 2020 or later upon mutual agreement.