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Marek Płoszajczak
GANIL
Caen, France

Application as postdoctoral fellowship in theoretical nuclear physics at GANIL

Dear Prof. Marek Płoszajczak,

I would like to introduce myself as an applicant for the postdoctoral position at GANIL. I am really excited about this potential opportunity to develop and deepen my knowledge of the nuclear physics, the Gamow shell model in particular, as well as working at an international institution as GANIL, where physics happens. This would be a mayor goal for my career and personal life.

During my actual PhD. with Rodolfo Id Betan as my supervisor, I am working with Gamow shell model including the non-resonance continuum for the description of the alpha decay of the nuclei Polonium-212, Tellurium-104 and Titanium-44. The theoretical framework include the two body force with the FHT interaction and the spectroscopic factor formalism with the norm kernel approach, among others.

In addition, since 2021 I'm part of a project with researchers from an information and system sciences institute seeking to achieve the nuclear drip-line by using mathematical and statistical methods, which gives me more computational skills and interdisciplinary work experience. Furthermore, I have collaborated in an informative publication o the nuclear physics formalism of the resonance states aimed to undergraduate students.

This experience has given me a variety of computer and physical skills, along with the ability to work both independently and in a groups. With this, I would be in a position to carry out a project in the nuclear shell model formalism that meets the expectations of the postdoctoral fellowship.

Thank you for your consideration of me as a candidate for the postdoctoral position at GANIL. I look forward to hearing from you and the project.

Sincerely,

Alan Cruz Dassie