Dr. Miguel Alcubierre Moya Instituto de Ciencias Nucleares Universidad Nacional Autónoma de México Ciudad Universitaria, Circuito Exterior S/N A.P. 70.543 04510 Mexico City, Mexico

Tashkent, Uzbekistan, 5th of February, 2018

Letter of reference to Professor Peter Otto Hess,

Dear Dr. Miguel Alcubierre Moya,

With this letter I would like to support candidacy of Prof. Peter Otto Hess for the "Professor Emérito" of the Universidad Nacional Autónoma de México.

I knew Prof. Hess from his publications since my student years 1987-1993 at the Tashkent State University (currently National University of Uzbekistan). His scientific works, especially the collective model of nuclei, so called Frankfurt model, were highly interested in international scientific community. Naturally the scientific field, which were developed with him and his collaborators had great scientific reputation and were highly recommended for the study among the students of the physics faculty of the Tashkent State University. His works on nuclear collective models are still guide for the scientists in nuclear structure theory.

I had honor to meet him personally in 2011 when I was as a posdoc at the Instituto Ciencias Nucleares, UNAM. His posdoctoral student Dr. Paul Fraser introduced me to him and we could immediately set collaboration. Under his supervision we have published following work:

H. Yepez-Martnez, M. J. Ermamatov, P. R. Fraser and P. O. Hess "Application of the Semimicroscopic Algebraic Cluster Model of -cluster nuclei in the p- and sd-shell", Phys. Rev. C 86 (2012), 034309.

During this collaboration I realized that Prof. Hess is not only good scientist and also excellent teacher and person. Since that time we keep with him scientific contact and started investigation to clarify connection of microscopic origin of geometrical potential energy surface on which he had a great experience. I would like to underline his punctuality, patience and excellent teaching ability. He taught me remotely a lot of interesting and valuable knowledge. As a result of this collaboration we have published following works:

- 1. P. O. Hess and M. J. Ermamatov, In search of a broader microscopic underpinning of the potential energy surface in heavy deformed nuclei (2017), Journal of Physics, Conf. Ser., 876 012012.
- 2. M. J. Ermamatov and P. O. Hess, Microscopically derived potential energy surfaces from mostly structural considerations (2016), Annals of Physics 371, 125-158

Nowadays we are continuing to work on this project. Also we started to apply semicroscopic algebraic cluster model developed by him and his students to the nuclear reaction processes. This is collaboration of three Mexican, Brazilian and Uzbekistan institutes. I believe our collaboration will be fruitful in the future.

I always felt warm scientific support and friendship from Prof. Hess side.

Taking into account his great contribution to the science and teaching, I would like strongly recommend candidacy of Prof. Peter Otto Hess to the position "Professor Emérito" of the Universidad Nacional Autónoma de México.

Sincerely Yours,

Dr. Mirshod Ermamatov

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