

Dr. Miguel Alcubierre Moya Director del ICN-UNAM Universidad Nacional Autonoma de Mexico C.U., A.p. 70-543 04510 Mecico-City Mexiko

Prof. Dr. Horst Stöcker Judah M. Eisenberg Professor Laureatus

Telefon +49 (0)69 798 47648 Telefax +49 (0)69 798 47600

E-Mail stoecker@fias.uni-frankfurt.de

Frankfurt, January 12, 2018

Dear Dr. Alcubierre Moya,

Herewith I would like to propose Dr. Peter 0. Hess for "Professor Emerito".

I know Dr. Hess since the 1970's when he was still a student at the Institute of Theoretical Physics at the Johann Wolfgang Goethe University, Frankfurt (Germany).

Already then he demonstrated to be a brilliant physicist, developing a geometrical model for nuclei and applying group theory. His first publication was on the gradient formula in unitary groups, which permits to calculate complicated matrix elements in an elegant manner. He was the only author! Since then he became internationally recognized for his work on geometrical models of nuclei.

In the 1980's he developed a brilliant analytic model for nuclear molecules, which he extended to three clusters end of the 1990's. Since mid of the 1980's he added particle physics to his area of activity and developed various QCD motivated models, which describe very well the Hadron spectrum and also predict various exotic states, which are of interest to the experimental search of such states at the FAIR project at GSI.

He continued to work on microscopic models, like the symplectic model of nuclei, in which he gained international reputation. A further demonstration of the tremendous broad spectrum of topics, on which Dr. Hess is working, he developed a very promising pseudocomplex field theory, which is automatically regularized. In the last ten years he started to work on extensions of the Theory of General Relativity to a pseudo-complex version. The predictions of this theory attracted the attention of an experimental group at the Max Planck Institute of Astrophysics at Garching, Munich, Germany. In 2014 a white paper was published for ALMA, with him as a co-author. The predictions of the pseudo-complex theory is the only theoretical model (besides the standard theory of relativity), which is included in the observations. This model was developed with scientists and students at the FIAS/University of Frankfurt.

That Dr. Hess made important contributions in all the topics mentioned is a clear indication not only of his universality but also on the great capacities of Dr. Hess to do research.

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Regierungspräsidium Darmstadt Az.: II21.1 – 25d 04/11 – (12) – 545 Finanzamt Frankfurt Steuernummer: 47 250 42161 Freistellungsbescheid vom 15.02.2017 Bankverbindung: Deutsche Bank IBAN: DE86500700100044422400 BIC/SWIFT-Code: DEUTDEFFXXX The acquired reputation of his research is also manifest in many invited papers and, for example, the SCOPUS price he obtained in 2010 and that in 2007 one of his papers was declared as one of the highlights published in J. Phys. G..

Apart of his research, Dr. Hess is also very active in forming many students. Due to his reputation he was invited to be the Director of Master and PhD thesis at the University of Frankfurt. From 2010 to 2016 he was the principal director of two Master thesis and three PhD students at Frankfurt/FIAS. During this time he visited the FIAS up to three times a year and from 2012 to 2013. Because of his expertise in particle physics and General Relativity, he got an invitation to visit for a year the laboratory GSI and the FIAS at the University of Frankfurt.

Further proofs of his international reputation are the double recognition as MERCARTOR professor, once at the University at Giessen (Germany) and from 2006 to 2007 at the University of Frankfurt (Germany). He received numerous acadmic recognitions/prices and it is worth mentioning that he was awarded last year *Adjunct Fellow of the* FIAS.Also his numerous invitations to conferences and universities all over the world are a proof of his international recognition.

To conclude, I highly recommend Dr. Peter 0. Hess for the "Professor Emerito", he is an ideal candidate for this price!

Yours sincerely

Horst Stöcker

Dr. h.c. mult. Horst Stoecker, Fellow IoP, Fellow EPS Judah M. Eisenberg Professor Laureatus Frankfurt Institute for Advanced Studies FIAS Institut für Theoretische Physik J.W. Goethe - Universität Frankfurt Scientific Director (em) and Senior Scientist GSI Helmholtzzentrum für Schwerionenforschung