

Professor Rob de Ruyter van Steveninck,
Chair, Biocomplexity Search Committee
Indiana University Bloomington,
Department of Physics,
Swain West 165 USA

Email : deruyter@indiana.edu

RE: Dr. Maxim Ponomarjov, a letter of recommendation to a Biocomplexity faculty position

Dear Professor de Ruyter van Steveninck:

This letter is in support of the application by Dr. Maxim Ponomarjov for the position in the Department of Physics, Indiana University Bloomington.

I am his PhD-thesis advisor. Maxim Ponomarjov has worked under my guidance for five years, first as a graduate student and then as a post-graduate student.

He started his physical and mathematical education early from secondary school (special physical and mathematical school No 45 attached to the St.Petersburg State University). So he was quickly adapted into the successive learning applied and computational mathematics then general physics during his undergraduate and graduate study at the St.Petersburg State University.

Since he had taken advanced courses on plasma kinetic theory and fluid dynamics he got an in-depth knowledge both of statistical, kinetic and hydrodynamic approaches to study of nonequilibrium processes in stochastic systems, gases, fluids and plasmas. He combines efficiently computational and analytical methods in his research.

In comparison with other postgraduate students, the applicant has demonstrated the highest enthusiasm, inventiveness and creativity in his research. His most advantageous point is the ability to suggest a new viewpoint on the problem. During his research he proposed new method of Imaginary emission for the simulations of fluids and plasma disturbances due to moving bodies. We obtained new computational and analytical results as applications of this method. Applicant has a number of high-level research publications in well reputed journals.

Undoubtedly, M. Ponomarjov is an intelligent person and he can work both on his own and in a team with high efficiency; in particular, he can study new theoretical topics with high adaptability to enter new research areas. He can motivate a small research group and guide graduate students in their theses works.

As the part of his post-graduate course, the applicant was responsible for conducting seminars and laboratory practice in Physics at State St-Petersburg University during two semesters. He delivered a number of lectures in plasma physics. This work shows him as an interesting, perspective teacher.

M. Ponomarjov is a winner of a number of fellowships and grants for his research both from international and russian foundations (Free University of West Berlin, Lebedev Physical Institute, International Center for Fundamental Physics (Moscow) in Plasma Physics and Astrophysics, Outstanding Graduate Student and Young Researcher Grants from St.Petersburg State University).

So, Dr. Ponomarjov is a highly qualified and very promising researcher with potential to develop into an outstanding teacher.

Sincerely yours,

Yuri Gunko

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