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Organizers
Quantum Computing Bootcamp
TJLAB

Dear QC Bootcamp Organizers:

It is a pleasure to write in support of Dr. Guangyao Chen for admission and support to attend your Quantum Computing Bootcamp. I have known Guangyao for eight years and I worked with him closely for the three years that he was a Research Associate in our Nuclear Theory Group from September 2014 to August 2017. In my view, Guangyao represents the ideal combination of a dedicated educator and a first-rate researcher. My close working relationship with Guangyao has mainly focused on research but I will also provide my positive impressions of his pedagogical talents. It is especially noteworthy that Guangyao aims to provide opportunities for undergraduate research especially in computer applications to research.

Indeed, Guangyao has recently launched an effort to develop an undergraduate curriculum at Jacksonville University in computational physics. At this time, he would like to learn more about quantum computing in order to integrate QC into his curriculum. Given his established talents and achievements in high-performance computing applied to high-energy nuclear physics research, his background in theoretical physics and his strong interest in teaching computational physics, I believe he makes an ideal candidate for your QC Bootcamp.

I would add that, though he is challenged by a significant teaching load, he has maintained his research efforts and is an active collaborator with me and with former members of my group in his established areas of expertise. These areas are ripe for being addressed with quantum computers and I am eager to collaborate with him in such endeavors as solving light-front Hamiltonian field theory on

quantum computers. Through the QC bootcamp he may also meet like-minded participants with whom he can collaborate on curriculum development as well.

Let me comment on some additional strengths that Guangyao exhibits. Guangyao gave generously of his time for mentoring our young graduate students as well as undergraduates here at Iowa State. His enthusiasm for physics is contagious. He also writes excellent manuscripts and delivers highly-polished seminars. Guangyao was a warm and collegial member of our group and interacted in a friendly and persuasive manner with all members of our community. He is well-suited for contributing substantially to a diverse learning environment.

In summary, I strongly support Dr. Guangyao Chen's application for admission and support to attend your Quantum Computing Bootcamp. He has the talent, the experience and the orientation to students to be an effective participant.

Sincerely yours,

A handwritten signature in cursive script that reads "James P. Vary". The ink is dark and the signature is fluid, with a large, stylized 'J' and 'V'.

James P. Vary
Professor of Physics