



Barcelona, May 21st 2023

To whom it may concern,

It is my immense pleasure to write this recommendation letter in support of Marc Fernández Palau's application. I am delighted to do so, since he is an outstanding professional and definitely a worthy candidate for the position.

My name is David Reguera López and I hold a Full Professor position at the Department of Condensed Matter Physics at the University of Barcelona since 2020. I have a well-established research trajectory combining theory and simulations in Condensed Matter Physics, with more than 90 peer-reviewed articles in international journals having more than 6000 citations. I am also Academic Secretary of the department, head of the Statistical Physics Supercomputing Lab and, together with Miquel Montero, responsible of the IT facilities of the Condensed Matter Physics' Department.

I have known Marc since November 2021, when we initiated a selection procedure to hire our new System Manager for both all the IT system of the Department as well as our Scientific Computation Cluster facilities. In his interview, he caused a very positive impression on us, supported by a solid and promising CV, so we decided to contract him. This decision turned out to be a big success, since during the year that he worked with us, he became one of the best system administrator we ever had and a big asset for our Department and our research.

With essentially no documentation, no training, and very little support on our side, he was able not only to master the administration of all our servers and all our scientific computation facilities, but also to improve them continuously and guarantee a smooth and reliable operation. As the sole system manager of our Department's Servers, he had full responsibilities on administering our local network, security, web, and email servers. He has done a fantastic job in updating the system and hardware of all our servers and setting up new services that have facilitated our daily work. In addition, he is providing outstanding personal IT support to all the staff of the department (more than 80 persons with about 75 desktop Computers using Linux, Mac OS and Windows as operating systems).

More importantly, he was the main system administrator of the Statistical Physics Supercomputing Lab. This local scientific computer infrastructure consists nowadays of a High Performance Computer cluster with 40 nodes, with more than 900 total cores, plus a 7 node GPU cluster. Marc invaluable dedication has been decisive to maintain, update and enlarge this infrastructure which is crucial for the research of



4 different groups and 25 researchers. Before his arrival, our systems were outdated, and we were experiencing many recurrent difficulties with networking and filesystems. By his own initiative he decided to devote his Final Degree Thesis to plan and set up from scratch the migration of our HPC cluster to a new server, with new operating system and queue server based on Slurm. I was very happy to be co-supervisor of his work, which he did almost independently and very successfully. In addition, he also provided hardware support beyond his duties, providing invaluable help to install, set up, and maintain all the new nodes that we acquired in the last year. One aspect of this work that I am particularly happy with is the fact that Marc is our first system administration that has documented all the daily tasks, services, and troubleshooting, thus facilitating enormously the job of his successor.

Marc succeeded in all the challenging tasks that we have assigned to him, and it was delightful to have him as system administration. He has always been very efficient, proactive in solving problems very often beyond his official hours and duties. I must say that I was very positively impressed by his performance, and that since his recruiting he became indispensable for our research and our Department. At the end of January, Marc decided to stop working for us to complete his formation and enrolled in a very high-level and time-demanding course on cybersecurity. We are missing him a lot and we have not yet succeeded in finding a system administrator with similar skills.

Marc is a very nice person, very responsible, and hard worker. He has excellent administration and technical skills, and has become an expert in the administration of scientific clusters. He is also a very active, helpful and proactive person, capable to come up with the right solution to every problem, undertake it independently, and succeed in achieving the proposed goals.

I have no doubts that he will succeed in whatever project that he will be undertaking. His departure was a big loss for our Department, but I am also convinced that he will benefit a lot from this opportunity and that it will be a crucial step in his promising early career.

Consequently, I am delighted to recommend Marc Fernández for the job. I do it enthusiastically and without reservations.

If you need any clarifications or further information, please do not hesitate in contacting me at the address above.

Sincerely yours,

A handwritten signature in blue ink, consisting of a stylized 'D' and 'R' followed by a horizontal line.

David Reguera