

To whom it may concern,

This letter concerns the application of Miguel Nebot for a postdoctoral position in your high energy theory group. I met Miguel during his undergraduate studies, when being one of my students he showed a great potentiality, that he later confirmed during his PhD studies under my direction. His brilliant academic record permitted him to get a fellowship from the Spanish Research Ministry to follow our Doctorate Program and develop a research work for his PhD. After his PhD he got postdoctoral position at Lisboa and Roma. It was at this time that he got the Spanish prestigious Juan de La Cierva postdoctoral position in Valencia.

During his stays at Valencia, he has participated actively in our scientific and academic activities, collaborating with several groups at the Institute. His research activities include Flavour Physics, CP and CPT violation and Neutrino Physics. He has collaborated with J. Bernabéu, N. Mavromatos, J. Papavassiliou, A. Santamaría, Gustavo Branco, Margarida Rebelo and myself among others.

Miguel is a very good physicist, with a solid formation combining conceptual skills with an extraordinary calculational preparation. He was at the origin of the practical implementation of the so called Model Independent Analysis in the quark flavor sector, now intensively developed by CKMfitter and UFit collaborations. And even he has contributed to clarify some apparent contradictions among the frequentist approach and the Bayesian one. It is important to remark, that it is this type of analysis that it is now used to look for the presence of New Physics.

His paper "New physics and evidence for a complex CKM" Nucl.Phys.B725:155-172,2005, clearly explains for the first time how data impose a complex CKM matrix even in the presence of New Physics. The paper entitled: "The Size of $\chi = \arg(-V_{ts} V_{tb}^* V_{cs} V_{cb}^*)$ and physics beyond the standard model" Nucl.Phys.B706:204-220,2005 is one of the first papers where it is studied the case of a large phase in B_s mixing. Its consequences in New Physics models has been studied in Phys.Rev.D79:096009,2009 with an important impact. The recent paper: arXiv:1207.4440, is the first of a series of important results on the up vector like quarks, that clearly shows the possibilities of Miguel: he is essentially the person in charge of the numerical analysis.

Miguel has developed satisfactorily all his potentialities, but a lack of aggressiveness makes him less known than what he deserves. He is a very solid researcher in theoretical particle physics and a good speaker in seminars or informal discussions. I strongly recommend his application for a postdoctoral position without any reservation.

Francisco J. Botella

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