



UvA-DARE (Digital Academic Repository)

Measurement of the atmospheric neutrino energy spectrum

Palioselitis, D.

[Link to publication](#)

Citation for published version (APA):

Palioselitis, D. (2012). *Measurement of the atmospheric neutrino energy spectrum*.

General rights

It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

Disclaimer/Complaints regulations

If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: <https://uba.uva.nl/en/contact>, or a letter to: Library of the University of Amsterdam, Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.

ACKNOWLEDGEMENTS

It has been undoubtedly a rewarding journey. And the fact that it is complete is not one man's work alone. Many people have contributed in various ways to the completion of this thesis and I want to thank them here. I sincerely apologize to those that I forgot due to my own fault, for I certainly do.

Paul Kooijman has been an excellent supervisor, with a deep knowledge and understanding of physics. Working next to him all these years gave me the opportunity to absorb some of this knowledge and have many fascinating discussions on physics; every now and again shifting our conversations to politics. I want to express my sincere thanks to Patrick Decowski who has taught me a lot, from the more technical aspects of this work, to the set of skills necessary to become a better physicist. Both of my advisors have been very supportive and I thank them for believing in me and providing me with confidence and courage, especially when my *reservoir* seemed to be running dry.

Maarten de Jong's work on the probability density functions has proved invaluable for the determination of the muon energy. I am grateful for the support he provided in many ways during my stay at Nikhef. I am thankful to Gerard van der Steenhoven and Els de Wolf for introducing me to the ANTARES crew, marking the start of this unique chapter in my life. I am very glad I had the chance to be part of the same group as Aart Heijboer and Claudio Kopper. I thank them for making their knowledge available to me when I needed it. I also want to thank all my collaborators in ANTARES and especially Maurizio Spurio, Cristina Carloganu, Juan de Dios Zornoza, Fabian Schüssler and Jutta Schnabel for their useful comments and discussions. I want to thank Tim Adye, the author of *RooUnfold*, for promptly replying and clarifying my questions. I also want to thank all the great physics and math mentors I met and worked together throughout the years I study physics; Piet Mulders, Stan Bentvelsen, Giorgos Lalazisis, Christos Eleftheriadis, Anastasios Liolios, Efthimios Palioselitis.

Eleonora Presani, I am so happy I had the chance to share an office with you at Nikhef. And that was only the beginning. Delicious dinners, doing Karate together, even your disapproval of my choice of a MacBook over a PS3. I would never exchange this experience for anything. Corey Reed, we attended the most awesome music festival ever in Madrid. 'Nough said! Lisa Hartgring, thank you for the unforgettable spontaneous dinners and the *musica intermezzos*. I also want to thank Claudio Bogazzi,

for all the good times at Nikhef, watching each other's back when defending IMP from intruders and his motivating demotivational posters. The experience of working at Nikhef was infinitely enhanced by the presence of Tri Astraatmadja, Gordon Lim, Ching Cheng Hsu, Giada Carminati and Guus Wijnker. I want to thank all the great people I met during the last few years at Nikhef; Dorothea Samtleben, Mieke Bouwhuis, Joerg Mechnich, Jeroen Snijdewint, Jelena Petrovic, Tino Michel, Erwin Visser, Stephan Schulte, Sipho van der Putten, Hegoi Garitaonandia. I also wish to thank Teus van Egdom and Ed van Willigen for making all aspects of my stay at Nikhef, with the exception of research itself, so much easier.

Whatever I say about Menelaos Tsakiris will not be enough. Thank you for the amazing MSc-PhD-trip we had together in the Netherlands, from the containers in the West to the neighborhood of Science Park. And the physics, the music, the food Miłosz Panfil has been a good friend. Thank you for the great times we had and our endless discussions on physics. Or on our twisted perception of what psychology and sociology is all about. I am more than grateful to Maria Tselengidou for the delicious muffins that gave me enough strength to work until past dinner time, her patience with a PhD candidate/patient in his last steps and so much more. Alexis Gillett, Susanne Waaijers, Chris White and Christian Mildner, thank you for the wonderful time we had playing music together, whether it was rock nights or jazz afternoons, among other reasons. Nefeli Georgoulia, thank you for the amazing time we spent together in Newtonstraat and a couple of other places around the globe. Cheers to Akis Gkaitatzis and Nikos Tsirintanis for all the fun times in Amsterdam and at Nikhef. My thanks, of course, to Vili Zampeli for the excellent dishes she prepared and for contributing significantly to the liveliness of our house every time she visited us. Andreas Stergiou and Dimitrios Korres, thank you for the beautiful memories I have from our living together as flatmates.

Many thanks to all my friends from Greece for being just that, friends who sent their words of support, and for all the experiences we shared so far and more that are still coming. That is a promise. My thanks to Elena Palioseliti, Giannis *Messlund Lumprn* Messaris, Sotiris Balatzis, George Balatzis, Eleni Siasiou, Theodore Pasahidis, Vassilis Kostopoulos, Asterios Kyriakou, Irini Papachristou, Kostas Savvidis and of course to my beloved godparents, Kiki and Paschalidis Kouimtzidis.

And finally, my family. My mother, my father, my grandmother and my grandfather, for always being there, supporting my choices. You know that none of this would have been possible without your help.

Dimitrios Palioselitis
Amsterdam 2012