

Informações sobre Ensino na Graduação e Pós-Graduação

Márcio José Menon (DRCC - IFGW – UNICAMP)

Conteúdo:

1. Orientações (25)
 - 1.1 Concluídas
 - 1.2 Em Andamento
2. Trabalhos Publicados com Orientandos (54)
 - 2.1 Periódicos Arbitrados de Circulação Internacional
 - 2.2 Proceedings de Conferências Internacionais

1. Orientações

1.1 Concluídas

Iniciação Científica:

- 1) Ricardo Paupitz Barbosa dos Santos, PIBIC/CNPq/UNICAMP, julho de 1995.
- 2) Paulo Alex da Silva Carvalho, fevereiro de 1996.
- 3) Regina Fonseca Ávila, FAPESP, fevereiro de 2001.
- 4) Geovanna Luiz Pereira da Silva, SAE - UNICAMP, julho de 2007.
- 5) Daniel dos Santos Almeida, FAPESP, dezembro de 2007.
- 6) Rafael Noberto Almeida da Costa, SAE - UNICAMP, julho de 2009.
- 7) Pedro Simoni Pasquini, Bolsa PIBIC-CNPq, fevereiro de 2011.
- 8) Paulo Victor Recchia Gomes da Silva, SAE-UNICAMP, julho de 2011.

Mestrado:

- 1) Álvaro Favinha Martini, CNPq, abril de 1995, IFGW
- 2) Paulo Alex da Silva Carvalho, FAPESP, maio de 1998, IFGW
- 3) Manoel Januário da Silva Neto, CAPES-PICD, outubro de 1998, IFGW
- 4) Regina Fonseca Ávila, FAPESP, março de 2003, IMECC
- 5) Geovanna Luiz Pereira da Silva, FAPESP, outubro de 2009, IFGW
- 6) Daniel Almeida Fagundes, FAPESP, março de 2010, IFGW
- 7) Paulo Victor Recchia Gomes da Silva, FAPESP, novembro de 2013, IFGW

Doutorado:

- 1) Dario Sassi Thober, CNPq, janeiro de 1998, IFGW
- 2) Paulo César Beggio, CNPq, maio de 1998, IFGW
- 3) Álvaro Favinha Martini, CAPES, junho de 1999, IFGW
- 4) Emerson Gustavo de Souza Luna, FAPESP, fevereiro de 2005, IFGW
- 5) Sergio Dias Campos, PPBIG - UNICAMP, agosto de 2007, IFGW
- 6) Regina Fonseca Ávila, FAPESP, fevereiro de 2009, IMECC
- 7) Daniel Almeida Fagundes, FAPESP, julho de 2014, IFGW

Pós-Doutorado

- 1) Álvaro Favinha Martini, FAPESP, setembro de 2004, IFGW
- 2) José Montanha Neto, CUPA - Jundiaí, PCV, dezembro 2009, IFGW

1.2 Em Andamento

Doutorado:

Paulo Victor Recchia Gomes da Silva, FAPESP, início março 2011, IFGW

2. Trabalhos Publicados com Orientandos

Trabalhos decorrentes dos programas orientados (nome dos orientandos em negrito):

2.1 Periódicos Arbitrados de Circulação Internacional

- 1) **A.F. Martini**, M.J. Menon, **D.S. Thober**, “Elementary Amplitudes in the Multiple Diffraction Theory Reexamined”, Physical Review D **54**, N. 3 (1996) 2385 - 2387.
- 2) **A.F. Martini** e M.J. Menon, “Multiple Diffraction Model for Proton-Proton Elastic Scattering and Total Cross Section Extrapolations to Cosmic-Ray Energies”, Physical Review D, **56**, N. 7 (1997) 4338 - 4349.
- 3) **P.A.S. Carvalho** e M.J. Menon. “Evidence for Eikonal Zeros in the Momentum Transfer Space”, Physical Review D, **56**, N. 11 (1997) 7321 - 7324.
- 4) **A.F. Martini**, M.J. Menon, **D.S. Thober**, “High energy parton-parton amplitudes from lattice QCD and the stochastic vacuum model”, Physical Review D, **57**, N. 5 (1998) 3026 - 3035.
- 5) **A.F. Martini**, M.J. Menon, J.T.S. Paes, **M.J. Silva Neto**, “Differential dispersion relations and elementary amplitudes in a multiple diffraction model”, Physical Review D, **59** (1999) 116006.

- 6) **P.C. Beggio**, M.J. Menon, P. Valin, “Scaling Violations: Connections between elastic and inelastic hadron scattering in a geometrical approach”, Physical Review D, **61** (2000) 034015.
- 7) **R.F. Ávila, E.G.S. Luna**, M.J. Menon, “High-Energy Proton-Proton Forward Scattering and Derivative Analyticity Relations”, Brazilian Journal of Physics, **31** (2001) 567 - 576.
- 8) **R.F. Ávila, E.G.S. Luna**, M.J. Menon, “Analytic Models and Forward Scattering from Accelerator to Cosmic-Ray Energies”, Physical Review D, **67** (2003) 054020.
- 9) **E.G.S. Luna**, M.J. Menon, “Extrema Bounds for the Soft Pomeron Intercept”, Physics Letters B, **565** (2003) 123 - 130.
- 10) **A.F. Martini**, M.J. Menon, “High-Energy Elementary Amplitudes from Quenched and Full QCD”, Physics Letters B, **570** (2003) 53 - 58.
- 11) **A.F. Martini**, M. J. Menon, **J. Montanha** “Correlations Between Total Cross Sections and Slopes”, Brazilian Journal of Physics, **34**, N. 1A (2004) 263 - 267.
- 12) **E.G.S. Luna**, M.J. Menon, **J. Montanha** “Extensions of the Extrema Bounds for the Pomeron Intercept to Meson-Proton, Gamma-Proton and Gamma-Gamma Scattering”, Brazilian Journal of Physics **34**, N. 1A (2004) 268 - 271.
- 13) **R.F. Ávila**, M.J. Menon, “Critical Analysis of Derivative Dispersion Relations at High Energies”, Nuclear Physics A, **744** (2004) 249 - 272.
- 14) **E.G.S. Luna**, M.J. Menon, **J. Montanha** “An Analysis on Extrema and Constrained Bounds for the Soft Pomeron Intercept”, Nuclear Physics A, **745** (2004) 104 - 120.
- 15) **P.A.S. Carvalho, A.F. Martini**, M.J. Menon, “Eikonal Representation in the Momentum-Transfer Space”, European Physical Journal C, **39** (2005) 357 - 376.
- 16) E.G.S. Luna, **A.F. Martini**, M.J. Menon, A. Mihara, A.A. Natale, “Influence of a Gluon Mass in pp and $\bar{p}p$ Forward Scattering”, Physical Review D **72**, 034019 (2005).
- 17) **R.F. Ávila, S.D. Campos**, M. J. Menon, **J. Montanha** “Phenomenological Analysis Connecting Proton-proton and Antiproton-proton Elastic Scattering”, European Physical Journal C, **47** (2006) 171 - 186.
- 18) **S.D. Campos**, M. J. Menon, **J. Montanha** “On the Slope of the Differential Cross Sections”, Brazilian Journal of Physics, **37** (2007) 80 - 83.
- 19) **R.F. Ávila**, M. J. Menon, “Derivative Dispersion Relations above the Physical Threshold”, Brazilian Journal of Physics, **37** (2007) 358 - 369.
- 20) **R.F. Ávila**, M. J. Menon, “From Integral to Derivative Dispersion Relations”, Brazilian Journal

of Physics, **37** (2007) 661 - 664.

- 21) **R.F. Ávila, S.D. Campos, M. J. Menon, J. Montanha** “On Model Independent Analysis of Elastic Hadron Scattering”, Brazilian Journal of Physics, **37** (2007) 675 - 678.
- 22) **R.F. Ávila, M. J. Menon**, “Eikonal Zeros in the Momentum Transfer Space: An Empirical Analysis”, European Physical Journal C, **54**, N. 4 (2008) 555 - 576.
- 23) **D.A. Fagundes, M.J. Menon, G.L.P. Silva**, “Model-Independent Data Reductions of Elastic Proton-Proton Scattering”, European Physical Journal C, **71** (2011) 1637/1 - 1637/14..
- 24) **D.A. Fagundes, M.J. Menon**, “Applicability of a Representation for the Martin’s Real-Part Formula in Model-Independent Analyses”, International Journal of Modern Physics A, **26**, N. 19 (2011) 3219 - 3247.
- 25) **D.A. Fagundes, M.J. Menon, P.V.R.G. Silva**, “Total Hadronic Cross Section Data and the Froissart-Martin Bound”, Brazilian Journal of Physics, **42**, (2012) 552 - 464.
- 26) **D.A. Fagundes, M.J. Menon**, “Total Hadronic Cross Section and the Elastic Slope: An Almost Model-Independent Connection”, Nuclear Physics A, **880**, (2012) 1 - 11.
- 27) **D.A. Fagundes, E.G.S. Luna, M.J. Menon, A.A. Natale**, “Aspects of a Dynamical Gluon Mass Approach to Elastic Hadron Scattering at LHC”, Nuclear Physics A, **886**, (2012) 48 - 70.
- 28) **D.A. Fagundes, M.J. Menon, P.V.R.G. Silva**, “On the rise of the proton-proton cross-sections at high energies ”, Journal of Physics G: Nuclear and Particle Physics, **40**, (2013) 065005.
- 29) **M.J. Menon, P.V.R.G. Silva**, “An updated analysis on the rise of the hadronic total cross-section at the LHC energy region ”, International Journal of Modern Physics A, **28** (2013) 1350099.
- 30) **M.J. Menon, P.V.R.G. Silva**, “A study on analytic parametrizations for the proton-proton cross-sections and asymptotia ”, Journal of Physics G: Nuclear and Particle Physics, **40**, (2013) 125001.
- 31) D.A. Fagundes, M.J. Menon, **P.V.R.G. Silva**, Exploring central opacity and asymptotic scenarios in elastic hadron scattering, Nuclear Physics A, **946** (2016) 194 - 226.

2.2 Proceedings de Conferências Internacionais

- 1) **A.F. Martini, M.J. Menon, D.S. Thober**, “Elementary profile functions in multiple diffraction models”, in “Frontiers in Strong Interactions”, VIth Blois Workshop on Elastic and Diffractive Scattering, Château de Blois, França (Editions Frontières, Gif-sur-Yvette, 1996) 121-125.
- 2) **A.F. Martini, M.J. Menon, D.S. Thober**, “Phenomenological Aspects of Elastic Parton-Parton Amplitudes”, in HADRON PHYSICS 96 - Topics on the Structure and Interaction of Hadronic Systems, ed. E. Ferreira et al. (World Scientific, Singapura, 1997) pp 342-345.

- 3) **P.A.S. Carvalho, A.F. Martini**, M.J. Menon, "Elastic Hadron Scattering and Total Cross Sections in a Multiple Diffraction Model", in HADRON PHYSICS 96 - Topics on the Structure and Interaction of Hadronic Systems, ed. E. Ferreira et al. (World Scientific, Singapura, 1997) pp 364-367.
- 4) **P.A.S. Carvalho, A.F. Martini**, M.J. Menon, "Semiempirical extraction of elementary amplitudes from experimental data on elastic hadron scattering", International Workshop on Hadron Physics 98 - Topics on the Structure and Interaction of Hadronic Systems (World Scientific, Singapure, 1999) p. 330-332.
- 5) **P.A.S. Carvalho, A.F. Martini**, M.J. Menon, A.E. Motter, "Analyticity and crossing at the elementary level in elastic hadron scattering", International Workshop on Hadron Physics 98 - Topics on the Structure and Interaction of Hadronic Systems (World Scientific, Singapure, 1999) p. 326-329.
- 6) **P.C. Beggio**, M.J. Menon, P. Valin, "Hadronic and elementary multiplicity distributions in a geometrical approach", Proc. of the VIIIth Blois Workshop (int. Conf. on Elastic and Diffractive Scattering), Eds. V.A. Petrov and A.V. Prokudin, Protvino, 28 June - 2 July, 1999 (World Scientific, Singapore, 2000) p. 371 - 376.
- 7) **E.G.S. Luna**, M.J. Menon, "Proton-proton total cross section scenarios at cosmic-ray energies", Pan American Advanced Studies Institute on "New States of Matter in Hadronic Interactions" (PASI 2002), Campos do Jordão, Brazil, 7-18 Jan 2002, edited by H. - Thomas Elze et al., American Institute of Physics (AIP) Conference Proceedings N. **631** (AIP, New York, 2002) p. 721 - 722
- 8) **E.G.S. Luna, A.F. Martini**, M.J. Menon, "Comparative study between a QCD inspired model and a multiple diffraction model", Proceedings of the VIII International Workshop on HADRON PHYSICS 2002 - Topics on the Structure and Interaction of Hadronic Systems, Bento Gonçalves, Rio Grande do Sul, 14-19 de abril de 2002, editores C.A.Z. Vasconcellos, V.E. Hercowitz, D. Hadjimichef, B.E.J. Bodmann, ISBN 981-238-192-9 (World Scientific, Singapura, 2003) p. 295 - 298.
- 9) **R.F. Ávila, E.G.S. Luna**, M.J. Menon, "On the role of the subtraction constant in analytic models for high energy forward scattering", Proceedings of the VIII International Workshop on HADRON PHYSICS 2002 - Topics on the Structure and Interaction of Hadronic Systems, Bento Gonçalves, Rio Grande do Sul, 14-19 de abril de 2002, editores C.A.Z. Vasconcellos, V.E. Hercowitz, D. Hadjimichef, B.E.J. Bodmann, ISBN 981-238-192-9 (World Scientific, Singapura, 2003) p. 335 - 338.
- 10) **R.A. Ávila, S.D. Campos**, M.J. Menon, **J. Montanha**, "Analytical fits to hadron-hadron differential cross section data at the diffraction peak", IX Hadron Physics and VII Relativistic Aspects of Nuclear Physics - A Joint Meeting on QCD and QGP, Rio de Janeiro, Brazil, 28 March - April 2004, editores M.E. Bracco, M. Chiapparini, E. Ferreira, T. Kodama, ISBN 0-7354-0223-X, American Institute of Physics (AIP) Conference Proceedings N. **739** (AIP, New York, 2004) p. 529 -

- 11) E.G.S. Luna, **A.F. Martini**, M.J. Menon, A. Mihara, A.A. Natale, “Preliminary results on the influence of a gluon mass in hadronic scattering”, IX Hadron Physics and VII Relativistic Aspects of Nuclear Physics - A Joint Meeting on QCD and QGP, Rio de Janeiro, Brazil, 28 March - April 2004, editors M.E. Bracco, M. Chiapparini, E. Ferreira, T. Kodama, ISBN 0-7354-0223-X, American Institute of Physics (AIP) Conference Proceedings N. **739** (AIP, New York, 2004) p. 572 - 574.
- 12) **A.F. Martini**, M.J. Menon, **J. Montanha** “Zeros in the electromagnetic and hadronic form factors ”, IX Hadron Physics and VII Relativistic Aspects of Nuclear Physics - A Joint Meeting on QCD and QGP, Rio de Janeiro, Brazil, 28 March - April 2004, editors M.E. Bracco, M. Chiapparini, E. Ferreira, T. Kodama, ISBN 0-7354-0223-X, American Institute of Physics (AIP) Conference Proceedings N. **739** (AIP, New York, 2004) p. 578 - 580.
- 13) **R.A. Ávila**, M.J. Menon, “Derivative Dispersion Relations”, Fourth International Winter Conference on Mathematical Methods in Physics, Centro Brasileiro de Pesquisas Físicas, Rio de Janeiro, RJ, 9 a 13 de agosto de 2004, editores S. Alves Dias, A. Bytsenko, J.A. Helayël-Neto, R. Kerner, M.E. Xavier, Proceedings of Science WC2004, 043 (POS.SISSA, Trieste, Italy, 2005); hep-ph/0411400.
- 14) **R.F. Ávila**, M.J. Menon, “Extended Derivative Dispersion Relations”, in Sense of Beauty in Physics - A Volume in Honour of Adriano Di Giacomo, edited by M. D’Elia, K. Konishi, E. Meggiolaro and P. Rossi (Edizione Plus, Pisa University Press, Pisa, Italy, 2006) p. 153 - 158.
- 15) **R.F. Ávila**, M. J. Menon, “Differential Operators for Scattering Amplitudes”, International Journal of Modern Physics E, **16** (2007) 2910 - 2914.
- 16) **G.L.P. Silva**, M. J. Menon, **R.F. Ávila** “Proton Profile Function at 52.8 GeV”, International Journal of Modern Physics E, **16** (2007) 2923 - 2926.
- 17) **D.A. Fagundes**, M.J. Menon and **G.L.P. Silva**, Empirical Results for the Eikonal from Proton-Proton Elastic Scattering. in *Proc. XI Hadron Physics*, eds. M. Nielsen, F.S. Navarra and M.E. Bracco, American Institute of Physics (AIP) Conference Proceedings N. **1296** (AIP, Melville, 2010), p. 278.
- 18) **D.A. Fagundes** and M.J. Menon, On a Model-independent Representation for the Real Part of the Elastic Hadron Amplitude, in *Proc. XI Hadron Physics*, eds. M. Nielsen, F.S. Navarra and M.E. Bracco, American Institute of Physics (AIP) Conference Proceedings N. **1296** (AIP, Melville, 2010), p. 282.
- 19) **D.A. Fagundes** and M.J. Menon, Proton-Proton Elastic Scattering: Empirical Results for the Opacity Function, in *Alberto Santoro - A life of achievements - A Festschrift on the occasion of his 70th birthday*, eds. F. Caruso, E. Christoph, V. Oguri, R. Rubinstein, (AIAFEX Editora, Rio de Janeiro, 2011), p. 69 - 81.

- 20) **D.A. Fagundes**, M.J. Menon, Hadronic Cross Sections, Elastic Slope and Physical Bounds, in *XII Hadron Physics 2012*, American Institute of Physics (AIP) Conference Proceedings N. **1520** (AIP, New York, 2013) 297 - 299.
- 21) **D.A. Fagundes**, M.J. Menon, **P.V.R.G. Silva**, Preliminary Results on the Empirical Applicability of the Tsallis Distribution in Elastic Hadron Scattering, in *XII Hadron Physics 2012*, American Institute of Physics (AIP) Conference Proceedings N. **1520** (AIP, New York, 2013) 300 - 302.
- 22) **D.A. Fagundes**, M.J. Menon, **P.V.R.G. Silva**, Asymptotic scenarios for the proton's central opacity: An empirical study, in *Diffraction 2014 - International Workshop on Diffraction in High-Energy Physics*, American Institute of Physics (AIP) Conference Proceedings N. **1654** (AIP, New York, 2015) 050005.
- 23) D.A. Fagundes, M.J. Menon, **P.V.R.G. Silva**, Updating an empirical analysis on the proton's central opacity and asymptotia, in *XIII International Workshop on Hadron Physics*, Open Access Journal of Physics: Conference Series (JPCS), 2015, e-Print: arXiv:1505.01233 [hep-ph].