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# Ricardo D'Elia Matheus

## Curriculum Vitae

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### EDUCATION

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| 2003 - 2006 | <b>Ph.D. in Physics</b> , December 2006<br>Universidade de São Paulo, USP, São Paulo, Brazil<br>Thesis: Exotic Particles in QCD Sum Rules<br>Areas of Concentration: Elementary Particle Physics,<br>Non-Perturbative QCD            |
| 2001 - 2003 | <b>M.S. in Physics</b> , April 2003<br>Universidade de São Paulo, USP, São Paulo, Brazil<br>Dissertation: The J/Psi-D-D Form Factor in QCD Sum Rules<br>Areas of Concentration: Elementary Particle Physics,<br>Non-Perturbative QCD |
| 1997 - 2000 | <b>B.A. in Physics</b> , December 2000<br>Universidade de São Paulo, USP, Sao Paulo, Brazil  |

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### GRANTS

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|-------------|--|
| 2012 - 2014 | <b>Research Project (“Projeto Regular”)</b><br>Granted by FAPESP (São Paulo State Research Support Foundation)<br>Project Title: Strongly Coupled Theories and LHC phenomenology                             |
| 2007 - 2010 | <b>Post-Doctoral Fellowship</b><br>Granted by FAPESP (São Paulo State Research Support Foundation)<br>Project Title: New Physics at the TeV scale: Strong Coupled Field<br>Theories and AdS Extra Dimensions |
| 2003 - 2006 | <b>Doctoral Fellowship</b> ,<br>Granted by FAPESP (São Paulo State Research Support Foundation)<br>Project Title: Charmed Form Factors in QCD Sum Rules  |
| 2001 - 2003 | <b>Master Studies Fellowship</b> ,<br>Granted by FAPESP (São Paulo State Research Support Foundation)<br>Project Title: The J/Psi-D-D Form Factor in QCD Sum Rules   |

1997 - 2000 **PIBIC Fellowship**,  
Granted by CNPq: (National Council of Scientific and Technological  
Development)  
Project: Development of the Chopper Cavity of the Microtron Particle  
Accelerator

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## POSITIONS HELD

Since 2011 **Assistant Professor**  
Instituto de Física Teórica, UNESP, São Paulo, Brazil  
Currently held (since December/2011)

2010 - 2011 **Assistant Professor**  
Universidade Federal de São Paulo, UNIFESP, Diadema, Brazil  
October/2010 to December/2011

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## RECENT RESEARCH ACTIVITIES

Currently working on two lines of research:

**1.** Standard Model extensions on the TeV scale, focusing on theories with Extra-Dimensions with AdS geometry. Using Monte Carlo event generators to study the LHC phenomenology of such models.

**2.** Use of non-perturbative QCD methods to the study of hadronic properties. Special interest in the hadronic spectrum and exotic hadrons.

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## SELECTED PUBLICATIONS (LAST 10 YEARS)

2012 **1.** Burdman, G., de Lima, L., **Matheus, R.D.**  
Is the LHC Observing the Pseudo-scalar State of a Two-Higgs Doublet Model?  
Physical Review D, v. 85, 95016, 2012.  
Cited 22 times.

2011 **2.** Zanetti, C.M., Nielsen, M., **Matheus, R. D.**  
QCD Sum Rules for the production of the X(3872) as a mixed molecule-  
charmonium state in B  
Physics Letters B, v. 702, 359, 2011.  
Cited 1 time.

**3.** Burdman, G., de Lima, L., **Matheus, R.D.**  
New Strongly Coupled Sector at the Tevatron and the LHC  
Physical Review D, v. 83, 35012, 2011.  
Cited 30 times.

- 2010 **4. Burdman, G., da Rold, L., Matheus, R.D.**  
Lepton Sector of a Fourth Generation  
Physical Review D, v. 82, 55015, 2010.  
Cited 22 times.
- 2009 **5. Burdman, G., da Rold, L., Eboli, O., Matheus, R.D.**  
A Strongly Coupled Fourth Generation at the LHC  
Physical Review D, v. 79, 075026, 2009.  
Cited 26 times.
- 6. Matheus, R. D.,** Navarra, F.S., Nielsen, M., Zanetti, C.M.  
QCD Sum Rules for the X(3872) as a mixed molecule-charmonium state  
Physical Review D, v. 80, 056002, 2009.  
Cited 26 times.
- 2007 **7. Matheus, R. D.,** Navarra, F.S., Nielsen, M., Rodrigues da Silva, R.  
Do the QCD sum rules support four-quark states?  
Physical Review D, v. 76, 056005, 2007.  
Cited 28 times.
- 8. Matheus, R.D.,** Narison, S., Nielsen, M., Richard, J.M.  
Can the X(3872) be a  $1^{++}$  four-quark state?  
Physical Review D, v. 75, 014005, 2007.  
Cited 65 times.
- 2006 **9. Matheus, R. D.,** Narison, S.  
Are the pentaquark sum rules reliable?  
Nuclear Physics. B, Proceedings Supplement. , v.152, p.236 - 241, 2006.  
Cited 40 times.
- 2005 **10. Bracco, M. E., Soares, A. L. F., Matheus, R. D.,** Navarra, F.S., Nielsen, M.  
Disentangling two- and four-quark state pictures of the charmed scalar mesons.  
Physics Letters. Section B, v.624, p.217 - 222, 2005.  
Cited 47 times.
- 2004 **11. Matheus, R. D.,** Navarra, F.S., Nielsen, M., R. da Silva, R., Lee, S. H.  
Are Theta+ and the Roper resonance diquark-diquark-antiquark states?.  
Physics Letters. Section B, v.578, p.323 - 329, 2004.  
Cited 95 times.
- 2002 **12. Matheus, R. D.,** Navarra, F.S., Nielsen, M., Rodrigues da Silva, R.  
The J/psi D D vertex in QCD sum rules.  
Physics Letters. Section B. , v.541, p.265 - 272, 2002.  
Cited 59 times.

## CITATION METRICS

Metric	All papers	Published only
Total number of citable papers analyzed:	31	19
Total number of citations:	538	465
Average citations per paper:	17.4	24.5
<b><i>h-index:</i></b>	<b>14</b>	<b>12</b>

inSPIRE data from September 17<sup>th</sup>, 2012