MAURO LUCIO PAPINUTTO

CURRICULUM VITÆ

Dipartimento di Fisica, "Sapienza" Università di Roma, Piazzale Aldo Moro 2, 00185 Roma, ITALY.

EDUCATION

01/02/2002 **PhD in Physics** at the University of Pisa, Italy.
Title of the Thesis: *New Lattice Approaches to Non-Leptonic Kaon Decays*; supervisors Prof. S. Caracciolo and Prof. G. Martinelli.

17/11/1998 **Diploma in Physics** at Scuola Normale Superiore di Pisa, Italy.
Final grade: 70/70 *cum laude*.

30/09/1998 **Degree in Physics** (Laurea) at the University of Pisa, Italy.
Final grade: 110/110 *cum laude*. Title of the Thesis: *Monte Carlo Methods for the Interacting Self-Avoiding Walk*; supervisor Prof. S. Caracciolo.

PROFESSIONAL EXPERIENCE

01/12/2011 **Ricercatore a tempo indeterminato** (assistant professor) at the Department of Physics, "Sapienza" Università di Roma, Italy.

2010 **"Ramon y Cajal" at Universidad Autonoma de Madrid (5-year spanish tenure track position)**, accepted and then declined.

2009–2011 **CNRS/IN2P3 research position ("CDD chercheurs") at LPSC**, Grenoble, France.

2007–2009 **Post-doctoral fellowship at CERN**, Geneva, Switzerland.

2005–2007 **Post-doc ("assegno di ricerca") at Sezione INFN di Roma Tre**, Italy

2003–2005 **Post-doctoral fellowship at NIC/DESY Zeuthen**, Germany.

2002–2003 **Post-doctoral fellowship at DESY Hamburg**, Germany.

1998–2001 **PhD student at the Physics Department, University of Pisa**, Italy

FUNDED RESEARCH PROJECTS

2015–2016 **PI** of the project **"The continuum limit of QCD with three dynamical quark flavours"** (Id n. 2015122835), coordinating 10 members of the CLS effort. **Selected by the 11th PRACE Call**. 74 Mega core hours (Mch) assigned on FERMI - IBM BG/Q - at CINECA, Italy.

2013–2015 **Scientist in Charge** of the **two-year post-doctoral position funded by Progetto Premiale INFN "SUMA"**. Position assigned to P. Vilaseca Mainar (November 1st 2013 - October 31st 2015).

2009–2012 **PI** of the project **"Lattice QCD Calculations in Hadron Physics"**, based at LPSC Grenoble, France. **30-month "Marie Curie European Reintegration Grant" (ERG)** funded with 37500 euros by the European Community 7th framework programme, with contract PERG05-GA-2009-249309.

2007–2009 **2-year "Marie Curie Intra-European Fellowship" (EIF)** with title **Lattice QCD with light quarks** based at CERN, Geneva, Switzerland. Funded by the European Community 6th framework programme with contract MEIF-CT-2006-040458.

2016– **Participation in the INFN project CIPE (budget 1 M euros)** which funds the theoretical physics community using high performance computing resources. 1 Post-doc assigned to the node Roma2-Roma1 with scientists in charge A. Vladikas. Position assigned to A. Lytle who started his contract in september 2018.

2013–2014 **Participation in two CLS projects selected by the 7th PRACE Call**: 70 Mega core hours (Mch) on FERMI (IBM BG/Q) at CINECA, Italy (PI: A. Vladikas) and 40 Mch on SuperMUC (IBM/Intel Sandy Bridge) at LRZ, Germany (PI: S. Schaefer).

2015–2018 Fondi Ateneo per la Ricerca, "Sapienza" Università di Roma, progetto "Theory and Phenomenology of the Fundamental Interactions", titolare R. Bonciani.

2013–2015 Fondi Ateneo per la Richerca 2013, Università "La Sapienza", progetto "Theory and Phenomenology of the Fundamental Interactions", titolare A.D. Polosa (codice C26A133HLL)

2013–2015 Acquisizione di medie e grandi attrezzature scientifiche, Università "La Sapienza", progetto "Calcolatore parallelo per calcolo scientifico", responsabile C. M. Casciola (codice C26G13R9ZT).

2012–2015 PRIN 2010-2011, Ministero dell'Università e della Ricerca, progetto "Simmetrie, masse e misteri: rottura della simmetria elettrodebole, mescolamento dei sapori, violazione di CP e materia oscura nell'era di LHC", Codice 2010YJ2NYW, titolare Prof. G. Martinelli (responsabile locale R. Contino).

2012–2014 Fondi Ateneo per la Richerca 2012, Università "La Sapienza", progetto "Theory and Phenomenology of the Fundamental Interactions", titolare R. Contino (codice C26A12JCEA).

2011 GENCI (High Performance Computing at IDRIS and CINES) Grant No. 2011-052271.

2010 GENCI (High Performance Computing at IDRIS and CINES) Grant No. 2010-052271.

2009 GENCI (High Performance Computing at IDRIS and CINES) Grant No. 2009-052271.

2006-2009 EU network "FLAVIAnet" contract MRTN-CT-2006-035482.

2005-2010 Groupement de Recherche "Physique subatomique et calculs sur reseau", CNRS/IN2P3-IRFU.

2004-2006 EU Integrated Infrastructure Initiative Hadron Physics (I3HP), contract RII3-CT-2004-506078.

2003-2008 "DFG Sonderforschungsbereich/Transregio" SFB/TR9-03.

TEACHING

2018/2019 **60-hour course** *Meccanica analitica e relativistica* (Classical Lagrangian and Hamiltonian mechanics and special relativity), 2nd year undergraduate in Physics, "Sapienza" Università di Roma.

2017/2018 **60-hour course** *Meccanica analitica e relativistica* (Classical Lagrangian and Hamiltonian mechanics and special relativity), 2nd year undergraduate in Physics, "Sapienza" Università di Roma.

2016/2017 **76-hour course** *Fisica Generale* (Mechanics, Thermodynamics, Electromagnetism, Optics), 1st year undergraduate in Chemistry and Pharmaceutical Technology, "Sapienza" Università di Roma.

2015/2016 **76-hour course** *Fisica Generale* (Mechanics, Thermodynamics, Electromagnetism, Optics), 1st year undergraduate in Chemistry and Pharmaceutical Technology, "Sapienza" Università di Roma.

2014/2015 **48-hour course** *Fisica Superiore* (Quantum Mechanics and Quantum Statistical Mechanics), 1st year master in Electronic Engineering, "Sapienza" Università di Roma.

2013/2014 **48-hour course** *Fisica Superiore* (Quantum Mechanics and Quantum Statistical Mechanics), 1st year master in Electronic Engineering, "Sapienza" Università di Roma.

2012/2013 **48-hour exercise classes** of the course *Meccanica* (titular of the course: Prof. F. Loverre), 1st year undergraduate in Physics, "Sapienza" Università di Roma.

2010 **20-hour course** *Topics in Perturbative and Non-Perturbative Quantum Field Theory* for the PhD school at Université Joseph Fourier (UJF), Grenoble, together with R. Bonciani.

2009/2010 **48-hour course** *Introduction to C++* (INF 361), 3rd year undergraduate in Physics/Computer Science, UJF, Grenoble.

2009/2010 **15-hour exercise classes** of the course *Mathématiques pour la Physique* (MAT 35a) (titular of the course: Prof. M. Klasen), 3rd year undergraduate in Physics/Chemistry, UJF, Grenoble.

2009 **8-hour course** *Non-Perturbative Renormalization in QCD* for the GDR "Calcul sur Réseau en Physique Subatomique", SPhN, Saclay, France

2006/2007 **16-hour exercise classes** of the course *Istituzioni di Fisica Teorica 2* (titular of the course: Prof. V. Lubicz), 3rd year undergraduate in Physics, Università di Roma Tre.

2005/2006 **16-hour exercise classes** of the course *Istituzioni di Fisica Teorica 1* (titular of the course: Prof. V. Lubicz), 2nd year undergraduate in Physics, Università di Roma Tre.

2005/2006 **16-hour exercise classes** of the course *Istituzioni di Fisica Teorica 2* (titular of the course: Prof. V. Lubicz), 3rd year undergraduate in Physics, Università di Roma Tre.

SUPERVISION OF STUDENTS

2017-2020 Co-advisor (with M. Bochicchio) of F. Scardino's PhD thesis ("Sapienza" Università di Roma).

2015-2016 Supervisor of F. Scardino's diploma thesis - "tesi di laurea magistrale" ("Sapienza" Università di Roma) - with title *New Techniques for the Computation of the Hadron Spectrum in Lattice QCD*.

2013 Supervisor of D. Preti's diploma thesis - "tesi di laurea magistrale" ("Sapienza" Università di Roma) - with title *Non-perturbative renormalization of* $\Delta F = 2$ *four-fermion operators*.

2009-2010 Co-advisor (with J.Carbonell) of P.-A. Harraud's PhD thesis (University J. Fourier, Grenoble) with title *Non-perturbative computation of nucleon generalized form factors*.

2009 Supervisor of the stage of Master of R. Boussaid (University of Clermont-Ferrand). Subject of the stage: *Non-perturbative computation of the renormalization constants of bilinear quark operators*.

OTHER QUALIFICATIONS

07/2018 "Abilitazione scientifica nazionale" to become Associate Professor (settore concorsuale 02/A2). Valid for 6 years.

01/2014	"Abilitazione scientifica nazionale" to become Associate Professor (settore concorsuale 02/A2). Valid for 6 years.
11/2014	Referee SIR 2014
2008-today	Referee for "Physics Letters B" (Elsevier B.V.), JHEP (Springer), "Few-Body Systems" (Springer) and "Advances in High Energy Physics" (Hindawi).
01/2010	Qualification aux fonctions de Maître de conférences (France). Valid for 4 years
02/2006	Qualification aux fonctions de Maître de conférences (France). Valid for 4 years
09/2002	**Award "New Talents" for the best theoretical talk** and Diploma "Bruno Pontecorvo" at the **International School of Subnuclear Physics, 40th Course** *From Quarks and Gluons to Quantum Gravity* **(directors G. 't Hooft and A. Zichichi)**, Erice, Italy.
07/1993	Participant, as one of the five members of the italian team, at the XXIV International Physics Olympiad, Williamsburg VA, USA.

SPOKEN LANGUAGES

1. **Italian** (native);
2. **English** (spoken/written: excellent)
3. **French** (spoken/written: excellent);
4. **German** (spoken/written: fair).

RESEARCH ACTIVITY

My research activity concerns the study of strongly interacting theories in the Standard Model (SM) and beyond (BSM). In particular I've been studying field theories regularised on a lattice, the only known approach which allow first-principle computations through numerical Monte Carlo techniques. During my career I have mainly studied QCD aspects relevant for the phenomenology of flavour physics and CP-violation within the SM and beyond. First of all by computing weak-matrix elements needed in the effective weak Hamiltonian approach to improve constraints on CKM and BSM parameters. In order to study B-physics quantities I contributed in the development of non-perturbative Heavy Quark Effective Theory (HQET) which, by working at a fixed order of the heavy-quark expansion, turns out to be a very useful tool to simulate the b-quark, too heavy for present available lattice spacings. Another interest, strictly related to the previous topics, is non-perturbative renormalisation where I have contributed in developing the two methods known at present, namely the RI-MOM scheme and the Schrödinger Functional scheme. I've also been working on the development of twisted-mass QCD, a regularisation that circumvents some of the drawbacks related to the explicit breaking of chiral symmetry present in the widely used Wilson's fermion discretisation. Another subject in which I have contributed is the investigation of baryon structure and spectroscopy. More recently I worked on exotic $c\bar{c}$ and $b\bar{b}$ meson spectroscopy, trying to understand the nature of the recently discovered X,Y,Z resonances. I have also started working on Large-N QCD, which represent an alternative expansion to perturbation theory in which many non-perturbative aspects of the theory appear in a natural way. However, many analytic properties of the large-N limit still need to be investigated (e.g. the short distance behaviour of correlation functions of composite operators or the non-perturbative structure of the renormalization counterterms). At the numerical level it would be very important to increase the accuracy in the computation of the glueball and meson spectra in the large N-limit. These studies represent a powerful guide to find a possible string theory solution of QCD.

PARTICIPATION IN INTERNATIONAL COLLABORATIONS

2012-today	Member of the CLS (Coordinated Lattice Simulations) effort: https://twiki.cern.ch/twiki/bin/view/CLS/WebIntro
2012-2015	Member of SUMA (INFN Super Massive Computing Project), "progetto premiale" funded by MIUR: https://web.infn.it/SUMA/index.php
2005-2012	Co-founder and member of the ETM (European Twisted Mass) Collaboration: https://www-zeuthen.desy.de/ kjansen/etmc/
2005-today	Member of the ALPHA Collaboration: https://www-zeuthen.desy.de/alpha/
2003-2005	Member of the XLF (Chiral Lattice Fermions) Collaboration, formed by research groups belonging to DESY Hamburg, DESY Zeuthen, Humboldt Universitaet Berlin and Freie Universitaet Berlin.
2000-2004	Member of the SPQcdR (Southampton-Paris-Rome Lattice QCD) Collaboraboration formed by research groups belonging to "La Sapienza", Roma Tre, Paris XI, Southampton and Valencia Universities.

PUBLICATIONS

- **Co-author of 37 articles published in peer reviewed journals with the highest impact factors** (JHEP, Nuclear Physics B, Physical Review, Physics Letters B, etc.) and of **42 conference proceedings of international conferences**, collecting more than **2235 citations** and **h-index 27** (data from the database `inspirehep.net`).
- For the complete list of publications see the web page:
  `http://inspirehep.net/search?ln=en&ln=en&p=f+a+papinutto`

TALKS

- **8 invited talks**: International Europhysics Conference on High-Energy Physics HEP2001 (Budapest) and HEP2007 (Manchester), workshop *"Matching light quarks to hadrons"* (Benasque, 2004), *"German-Japanese" Symposium* (DESY-Zeuthen 2004), workshop *"Twisted mass lattice fermions"* (Rome, 2005), workshop *"Lattice QCD simulations with light quarks"* (Ringberg Castle, 2006), International Conference QCD2010 (Montpellier), workshop *"Lattice QCD and hadron physics"* (ECT* Trento, 2014);
- **10 talks at the annual "International Symposium on Lattice Field Theories"**: Berlin 2001, Boston 2002, Tsukuba 2003, Chicago 2004, Dublin 2005, Regensburg 2007, Villasimius 2010, Mainz 2013, New York 2014, Kobe 2015;
- **more than 40 talks** in European Universities/Research Centres/Workshops/Schools.

BIBLIOMETRIC PARAMETERS

COMPLETE SCIENTIFIC PRODUCTION	Scopus	inspirehep.net
Number of articles	36	37
Number of proceedings	40	42
Number of citations (articles)	1190	1872
Average citations (articles)	33.1	50.6
Total number of citations	1298	2235
$h-$index (only articles)	21	23
Total $h-$index	22	27
Total Impact Factor (articles)	156.9	
Average Impact Factor per article	4.904	
LAST 10 YEARS	Scopus	inspirehep.net
Number of articles	14	15
Number of proceedings	15	17
Number of citations (articles)	409	643
Average citations (articles)	29.2	42.9
Total number of citations	420	745
$h-$index (only articles)	10	11
Total $h-$index	10	13

PUBLICATIONS WITH REFEREES

1. M. Papinutto, F. Scardino and S. Schaefer.
New extended interpolating fields built from three-dimensional fermions
Phys. Rev. D **98** (2018) no.9, 094506.

2. P. Dimopoulos, G. Herdoiza, M. Papinutto, C. Pena, D. Preti and A. Vladikas.
Non-Perturbative Renormalisation and Running of BSM Four-Quark Operators in $N_f = 2$ QCD
Eur. Phys. J. C **78** (2018) no.7, 579.

3. Mauro Papinutto, Carlos Pena and David Preti.
On the perturbative renormalisation of four-quark operators for new physics
Eur. Phys. J. C **77** (2017) no.6, 376; Erratum: Eur. Phys. J. C **78** (2018) no.1, 21.

4. M. Bruno, D. Djukanovic, G. P. Engel, A. Francis, G. Herdoiza, H. Horch, P. Korcyl, T. Korzec, M. Papinutto, S .Schaefer, E. Scholz, J. Simeth, H. Simma, W. Söldner.
Simulation of QCD with $N_f = 2 + 1$ flavors of non-perturbatively improved Wilson fermions
JHEP **1502** (2015) 043.

5. A. Esposito, M. Papinutto, A. Pilloni, A. D. Polosa and N. Tantalo.
Doubly Charmed Tetraquarks in B_c and Ξ_{bc} Decays
Phys. Rev. D **88** (2013) 054029.

6. V. Bertone, N. Carrasco, M. Ciuchini, P. Dimopoulos, R. Frezzotti, V. Gimenez, V. Lubicz, G. Martinelli, F. Mescia, M. Papinutto, G.C. Rossi, L. Silvestrini, S. Simula, C. Tarantino, A. Vladikas (ETM Collaboration).
Kaon Mixing Beyond the SM from N_f=2 tmQCD and model independent constraints from the UTA
JHEP **1303** (2013) 089.

7. C. Alexandrou, J. Carbonell, D. Christaras, V. Drach, M. Gravina and M. Papinutto.
Strange and charm baryon masses with two flavors of dynamical twisted mass fermions
Phys. Rev. D **86** (2012) 114501.

8. C. Alexandrou, J. Carbonell, M. Constantinou, P. A. Harraud, P. Guichon, K. Jansen, C. Kallidonis, T. Korzec, M. Papinutto (ETM Collaboration).
Moments of nucleon generalized parton distributions from lattice QCD
Phys. Rev. D**83** (2011) 114513.

9. C. Alexandrou, M. Brinet, J. Carbonell, M. Constantinou, P. A. Harraud, P. Guichon, K. Jansen, T. Korzec, M. Papinutto (ETM Collaboration).
Nucleon electromagnetic form factors in twisted mass lattice QCD
Phys. Rev. D**83** (2011) 094502.

10. C. Alexandrou, M. Brinet, J. Carbonell, M. Constantinou, P. A. Harraud, P. Guichon, K. Jansen, T. Korzec, M. Papinutto (ETM Collaboration).
Axial Nucleon form factors from lattice QCD
Phys. Rev. D**83** (2011) 045010.

11. S. Caracciolo, M. Gherardi, M. Papinutto, A. Pelissetto.
Geometrical Properties of Two-Dimensional Interacting Self-Avoiding Walks at the Theta-Point
J. Phys. A **44** (2011) 115004.

12. M. Constantinou, P. Dimopoulos, R. Frezzotti, K. Jansen, V. Gimenez, V. Lubicz, F. Mescia, H. Panagopoulos, M. Papinutto, G.C. Rossi, S. Simula, A. Skouroupathis, F. Stylianou, A. Vladikas (ETM Collaboration).
B_K-parameter from $N_f = 2$ twisted mass lattice QCD
Phys. Rev. D**83** (2011) 014505.

13. P. Dimopoulos, G. Herdoiza, F. Palombi, M. Papinutto, C. Pena, A. Vladikas and H. Wittig.
Non-perturbative renormalisation of $\Delta F = 2$ four-fermion operators in two-flavour QCD
JHEP **0805** (2008) 065.

14. B. Blossier, Ph. Boucaud, P. Dimopoulos, F. Farchioni, R. Frezzotti, V. Gimenez, G. Herdoiza, K. Jansen, V. Lubicz, C. Michael, D. Palao, M. Papinutto, A. Shindler, S. Simula, C. Tarantino, C. Urbach, U. Wenger (ETM Collaboration).
Light quark masses and pseudoscalar decay constants from $N_f = 2$ Lattice QCD with twisted mass fermions
JHEP **0804** (2008) 020.

15. T. Chiarappa, K. Jansen, K.-I. Nagai, M. Papinutto, L. Scorzato, A. Shindler, C. Urbach, U. Wenger, I. Wetzorke.
Iterative methods for overlap and twisted mass fermions
Comput. Sci. Disc. **1** (2008) 015001.

16. F. Palombi, M. Papinutto, C. Pena and H. Wittig.
Non-perturbative renormalization of static-light four-fermion operators in quenched lattice QCD
JHEP **0709** (2007) 062.

17. Ph. Boucaud, P. Dimopoulos, F. Farchioni, R. Frezzotti, V. Gimenez, G. Herdoiza, K. Jansen, V. Lubicz, G. Martinelli, C. McNeile, C. Michael, I. Montvay, D. Palao, M. Papinutto, J. Pickavance, G.C. Rossi, L. Scorzato, A. Shindler, S. Simula, C. Urbach, U. Wenger (ETM collaboration).
Dynamical twisted mass fermions with light quarks
Phys. Lett. B **650** (2007) 304.

18. M. Della Morte, N. Garron, M. Papinutto and R. Sommer.
Heavy quark effective theory computation of the mass of the bottom quark
JHEP **0701** (2007) 007.

19. D. Guadagnoli, V. Lubicz, M. Papinutto, S. Simula.
First Lattice QCD Study of the $\Sigma \to n$ Axial and Vector Form Factors with SU(3) Breaking Corrections
Nucl. Phys. B **761** (2007) 63.

20. F. Palombi, M. Papinutto, C. Pena, H. Wittig.
A Strategy for implementing non-perturbative renormalisation of heavy-light four-quark operators in the static approximation
JHEP **0608** (2006) 017.

21. S. Capitani, K. Jansen, M. Papinutto, A. Shindler, C. Urbach, I. Wetzorke.
Parton distribution functions with twisted mass fermions
Phys. Lett. B **639** (2006) 520.

22. R. Frezzotti, G. Martinelli, M. Papinutto, G.C. Rossi.
Reducing cutoff effects in maximally twisted lattice QCD close to the chiral limit
JHEP **0604** (2006) 038.

23. K. Jansen, C. McNeile, C. Michael, K. Nagai, M. Papinutto, J. Pickavance, A. Shindler, C. Urbach, I. Wetzorke.
Flavor breaking effects of Wilson twisted mass fermions
Phys. Lett. B **624** (2005) 334.

24. D. Guadagnoli, M. Papinutto and S. Simula.
Extracting excited states from lattice QCD: The Roper resonance
Nucl. Phys. A **755** (2005) 485.

25. D. Becirevic, D. Guadagnoli, G. Isidori, V. Lubicz, G. Martinelli, F. Mescia, M. Papinutto, S. Simula, C. Tarantino, G. Villadoro.
SU(3)-breaking effects in kaon and hyperon semileptonic decays from lattice QCD
Eur. Phys. J. A **24S1** (2005) 69.

26. K. Jansen, M. Papinutto, A. Shindler, C. Urbach, I. Wetzorke.
Quenched scaling of Wilson twisted mass fermions
JHEP **0509** (2005) 071.

27. K. Jansen, M. Papinutto, A. Shindler, C. Urbach, I. Wetzorke.
Light quarks with twisted mass fermions
Phys. Lett. B **619** (2005) 184.

28. P. Boucaud, V. Gimenez, C.J.D. Lin, V. Lubicz, G. Martinelli, M. Papinutto, C.T. Sachrajda.
An exploratory study of matrix elements of $\Delta I = 3/2$ $K \to \pi\pi$ decays at next-to-leading order in the chiral expansion
Nucl. Phys. B **721** (2005) 175.

29. W. Bietenholz, S. Capitani, T. Chiarappa, N. Christian, M. Hasenbusch, K. Jansen, K.I. Nagai, M. Papinutto, L. Scorzato, S. Shcheredin, A. Shindler, C. Urbach, U. Wenger, I. Wetzorke.
Going chiral: overlap versus twisted mass fermions
JHEP **0412** (2004) 044.

30. D. Guadagnoli, M. Papinutto and S. Simula.
Extracting excited states from lattice QCD: The Roper resonance
Phys. Lett. B **604** (2004) 74.

31. D. Becirevic, P. Boucaud, V. Gimenez, V. Lubicz and M. Papinutto.
B_K from the lattice with Wilson quarks
Eur. Phys. J. C **37** (2004) 315.

32. D. Becirevic, V. Gimenez, V. Lubicz, G. Martinelli, M. Papinutto and J. Reyes.
Renormalization constants of quark operators for the non-perturbatively improved Wilson action
JHEP **0408** (2004) 022.

33. D. Becirevic, M. Ciuchini, E. Franco, V. Gimenez, G. Martinelli, A. Masiero, M. Papinutto, J. Reyes, L. Silvestrini.
B_d–$\bar{B}_d$ mixing and the $B_d \to J/\psi K_s$ asymmetry in general SUSY models
Nucl. Phys. B **634** (2002) 105.

34. S. Caracciolo, M. Papinutto and A. Pelissetto.
Dynamic Critical Behavior Of An Extended Reptation Dynamics For Self-Avoiding Walks
Phys. Rev. E **65** (2002) 031106.

35. D. Becirevic, V. Gimenez, G. Martinelli, M. Papinutto and J. Reyes.
B-parameters of the complete set of matrix elements of $\Delta B = 2$ operators from the lattice
JHEP **0204** (2002) 025.

36. D. Becirevic, P. Boucaud, V. Gimenez, V. Lubicz, G. Martinelli, J. Micheli and M. Papinutto.
K^0–$\bar{K}^0$ Mixing with Wilson Fermions without Subtractions
Phys. Lett. B **487** (2000) 74.

37. S. Caracciolo, M.S. Causo, G. Ferraro, M. Papinutto and A. Pelissetto.
Bilocal Dynamics for Self-avoiding Walks
Jour. Stat. Phys. **100** (2000) 1111.

CONFERENCE PROCEEDINGS

38. F. Scardino, M. Papinutto and S. Schaefer.
New extended interpolating operators for hadron correlation functions
Proc. Sci. **LAT2016** (2016) 386.

39. P. V. Mainar, M. Dalla Brida and M. Papinutto.
Perturbative renormalization of $\Delta S = 2$ four-fermion operators with the chirally rotated Schrödinger functional
Proc. Sci. **LAT2015** (2015) 252.

40. M. Papinutto, C. Pena and D. Preti.
Non-perturbative renormalization and running of $\Delta F = 2$ four-fermion operators in the SF scheme
Proc. Sci. **LAT2014** (2014) 281.

41. A. L. Guerrieri, M. Papinutto, A. Pilloni, A. D. Polosa and N. Tantalo.
Flavored tetraquark spectroscopy
Proc. Sci. **LAT2014** (2014) 106.

42. M. Papinutto, F. Piccinini, A. Pilloni, A. D. Polosa and N. Tantalo.
A Tentative Description of $Z_{c,b}$ States in Terms of Metastable Feshbach Resonances
arXiv:1311.7374 [hep-ph], proceedings of the *6th International Workshop on Charm Physics (Charm 2013)*.

43. M. Papinutto, G. Herdoiza, C. Pena and A. Vladikas.
Renormalization of HQET $\Delta B = 2$ operators: O(a) improvement and $1/m$ matching with QCD
Proc. Sci. **LAT2013** (2013) 317.

44. N. Carrasco, V. Gimenez, P. Dimopoulos, R. Frezzotti, D. Palao, G.C. Rossi, G. Herdoiza, V. Lubicz, C. Tarantino, G. Martinelli, M. Papinutto, F. Sanfilippo, A. Shindler, S. Simula [ETM Collaboration].
Neutral meson oscillations in the Standard Model and beyond from N_f=2 Twisted Mass Lattice QCD
Proc. Sci. **LAT2012** (2012) 105

45. C. Alexandrou, M. Brinet, J. Carbonell, M. Constantinou, P. Guichon, P. A. Harraud, K. Jansen, C. Kallidonis, T. Korzec, M. Papinutto (ETM Collaboration).
Nucleon form factors and moments of parton distributions in twisted mass lattice QCD
Proc. Sci. EPS-**HEP2011** (2011) 308.

46. N. Carrasco, V. Gimenez, P. Dimopoulos, R. Frezzotti, D. Palao, G. C. Rossi, V. Lubicz, M. Papinutto, F. Sanfilippo, S. Simula (ETM Collaboration).
K^0–$\bar{K}^0$ mixing in the Standard Model from $N_f = 2 + 1 + 1$ Twisted Mass Lattice QCD
Proc. Sci. **LAT2011** (2011) 276.

47. P. Dimopoulos, R. Frezzotti, V. Gimenez, V. Lubicz, G. Martinelli, F. Mescia, M. Papinutto, G.C. Rossi, S. Simula, A. Vladikas (ETM Collaboration).
K^0–$\bar{K}^0$ Mixing Beyond the SM from $N_f = 2$ tmQCD
Proc. Sci. **LAT2010** (2010) 302.

48. C. Alexandrou, J. Carbonell, V. Drach, M. Papinutto (ETM Collaboration).
Strange and charmed baryons using $N_f = 2$ twisted mass QCD
Proc. Sci. **LAT2010** (2010) 120.

49. C. Alexandrou, J. Carbonell, V. Drach, K. Jansen, M. Papinutto (ETM Collaboration).
Low lying baryon spectrum with $N_f = 2 + 1 + 1$ dynamical twisted quarks
Proc. Sci. **LAT2010** (2010) 101.

50. C. Alexandrou, J. Carbonell, M. Constantinou, P. Guichon, P. A. Harraud, K. Jansen, T. Korzec, M. Papinutto (ETM Collaboration).
Nucleon Structure in Lattice QCD using twisted mass fermions
Proc. Sci. **ICHEP2010** (2010) 361.

51. J. Carbonell, V. Drach, M. Papinutto (ETM Collaboration).
From strange to charmed baryons using two-flavour QCD
Nucl. Phys. Proc. Suppl. **207-208** (2010) 367.

52. V. Bertone, P. Dimopoulos, R. Frezzotti, V. Gimenez, V. Lubicz, F. Mescia, D. Palao, M. Papinutto, G.C. Rossi, S. Simula, A. Vladikas.
Kaon oscillations in the Standard Model and Beyond using $N_f = 2$ dynamical quarks
Proc. Sci. **LAT2009** (2009) 258.

53. M. Papinutto.
Phenomenological applications of non-perturbative heavy quark effective theory
J. Phys. Conf. Ser. **110** (2008) 102008.

54. F. Palombi, M. Papinutto, C. Pena and H. Wittig.
First quenched results for the matrix elements of the B_{B_s} mixing parameter in the static limit from tmQCD
Proc. Sci. **LAT2007** (2007) 366.

55. P. Dimopoulos, G. Herdoiza, A. Vladikas, F. Palombi, M. Papinutto, C. Pena and H. Wittig.
Non-perturbative renormalisation of four-fermion operators in $N_f = 2$ QCD
Proc. Sci. **LAT2007** (2007) 368.

56. P. Dimopoulos, R. Frezzotti, G. Herdoiza, A. Vladikas, V. Lubicz, S. Simula, M. Papinutto.
Renormalisation of quark bilinears with $N_f = 2$ Wilson fermions and tree-level improved gauge action
Proc. Sci. **LAT2007** (2007) 241.

57. L. Scorzato, F. Farchioni, P. Hofmann, K. Jansen, I. Montvay, G. Munster, M. Papinutto, E.E. Scholz, A. Shindler, N. Ukita, C. Urbach, U. Wenger, I. Wetzorke.
$N_f = 2$ lattice QCD and chiral perturbation theory
Nucl. Phys. Proc. Suppl. **153** (2006) 283.

58. S. Capitani, K. Jansen, M. Papinutto, A. Shindler, I. Wetzorke and C. Urbach.
3-point functions from twisted mass lattice QCD at small quark masses
Proc. Sci. **LAT2005** (2005) 341.

59. K. Jansen, M. Papinutto, A. Shindler, C. Urbach and I. Wetzorke.
Scaling test of quenched Wilson twisted mass QCD at maximal twist
Proc. Sci. **LAT2005** (2005) 231.

60. M. Della Morte, N. Garron, R. Sommer and M. Papinutto.
A quenched study of m_b in HQET beyond the leading order
Proc. Sci. **LAT2005** (2005) 224.

61. G. Rossi, R. Frezzotti, G. Martinelli and M. Papinutto.
Cutoff effects in maximally twisted LQCD
Proc. Sci. **LAT2005** (2005) 285.

62. F. Farchioni, P. Hofmann, K. Jansen, I. Montvay, G. Munster, M. Papinutto, E.E. Scholz, L. Scorzato, A. Shindler, N. Ukita, C. Urbach, U. Wenger, I. Wetzorke.
Dynamical twisted mass fermions
Proc. Sci. **LAT2005** (2005) 072.

63. M. Della Morte, N. Garron, R. Sommer and M. Papinutto.
A strategy for the computation of m_b including 1/m terms
Proc. Sci. **LAT2005** (2005) 223.

64. D. Guadagnoli, V. Lubicz, G. Martinelli, M. Papinutto, S. Simula and G. Villadoro.
Chiral extrapolation of hyperon vector form factors
Proc. Sci. **LAT2005** (2005) 358.

65. F. Farchioni, K. Jansen, C. McNeile, C. Michael, I. Montvay, K. Nagai, M. Papinutto, J. Pickavance, E. Scholz, L. Scorzato, A. Shindler, N. Ukita, C. Urbach, U. Wenger, I. Wetzorke.
Twisted mass fermions: Neutral pion masses from disconnected contributions
Proc. Sci. **LAT2005** (2005) 033.

66. F. Palombi, M. Papinutto, C. Pena and H. Wittig.
B_0–$\bar{B}_0$ mixing in the static approximation from the Schroedinger functional and twisted mass QCD
Proc. Sci. **LAT2005** (2005) 214.

67. W. Bietenholz, S. Capitani, T. Chiarappa, M. Hasenbusch, K. Jansen, K.-I. Nagai, M. Papinutto, L. Scorzato, S. Shcheredin, A. Shindler, C. Urbach, U. Wenger, I. Wetzorke.
Comparison between overlap and twisted mass fermions towards the chiral limit
Nucl. Phys. Proc. Suppl. **140** (2005) 683.

68. T. Chiarappa, K. Jansen, K.-I. Nagai, M. Papinutto, L. Scorzato, A. Shindler, C. Urbach, U. Wenger, I. Wetzorke.
Comparing iterative methods for overlap and twisted mass fermions
Nucl. Phys. Proc. Suppl. **140** (2005) 853.

69. D. Guadagnoli, G. Martinelli, M. Papinutto and S. Simula.
Semileptonic hyperon decays on the lattice: An exploratory study
Nucl. Phys. Proc. Suppl. **140** (2005) 390.

70. P. Boucaud, V. Gimenez, C.-J.D. Lin, V. Lubicz, G. Martinelli, M. Papinutto, C.T. Sachrajda.
Matrix elements of $\Delta I = 3/2$ $K \to \pi\pi$ decays
Nucl. Phys. Proc. Suppl. **129** (2004) 314.

71. W. Bietenholz, S. Capitani, T. Chiarappa, M. Hasenbusch, K. Jansen, M. Muller-Preussker, K.I. Nagai, M. Papinutto, S. Shcheredin, A. Shindler, C. Urbach, I. Wetzorke.
Extracting physics from an unphysical situation: Light mesons in a small box
Published in Juelich 2004, NIC Symposium 117-127.

72. D. Becirevic, V. Gimenez, V. Lubicz, G. Martinelli, M. Papinutto, J. Reyes and C. Tarantino.
Non-perturbative renormalization constants and light quark masses
Nucl. Phys. Proc. Suppl. **119** (2003) 442.

73. D. Becirevic, P. Boucaud, V. Gimenez, C.-J.D. Lin, V. Lubicz, G. Martinelli, M. Papinutto, C.T. Sachrajda.
Kaon weak matrix elements with Wilson fermions
Nucl. Phys. Proc. Suppl. **119** (2003) 359.

74. D. Becirevic, V. Gimenez, V. Lubicz, G. Martinelli, M. Papinutto and J. Reyes.
Non-perturbative renormalization of four fermion operators and B^0–B^0 mixing with Wilson fermions
Nucl. Phys. Proc. Suppl. **119** (2003) 619.

75. P. Boucaud, V. Gimenez, C.-J.D. Lin, V. Lubicz, G. Martinelli, M. Papinutto, F. Rapuano, C.T. Sachrajda.
$K \to \pi\pi$ matrix elements beyond the leading-order chiral expansion
Nucl. Phys. Proc. Suppl. **106** (2002) 329.

76. P. Boucaud, V. Gimenez, C.-J.D. Lin, V. Lubicz, G. Martinelli, M. Papinutto, F. Rapuano, C.T. Sachrajda.
Extraction of $K \to \pi\pi$ matrix elements with Wilson fermions
Nucl. Phys. Proc. Suppl. **106** (2002) 323.

77. D. Becirevic, V. Gimenez, G. Martinelli, M. Papinutto and J. Reyes.
Combined relativistic and static analysis for all $\Delta B = 2$ operators
Nucl. Phys. Proc. Suppl. **106** (2002) 385.

78. D. Becirevic, P. Boucaud, V. Gimenez, V. Lubicz, G. Martinelli and M. Papinutto.
Matrix elements of $\Delta S = 2$ operators with Wilson fermions
Nucl. Phys. Proc. Suppl. **106** (2002) 326.

79. M. Papinutto ($\mathrm{SPQ_{CD}R}$ Collaboration).
$K \to \pi\pi$ matrix elements from lattice QCD with Wilson fermions
Proc. Sci. **HEP2001** (2001) 228.

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