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Full Professor in Theoretical Physics, Universitat de Barcelona.

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Summary

My main scientific activity is phenomenology of weak and strong interactions in the Standard Model (SM) and beyond. I have mainly explored the weak decays of hadrons with a goal of selecting observables that allow a high precision theoretical predictions that could be experimentally tested in order to discover the effects of New Physics (NP) (such as extra sources of CP violation with respect to the SM). High precision tests of loop induced processes in the SM (such as $(g-2)_{\mu}$, $b \rightarrow s\ell^+\ell^-$ modes, and many others) offer a window to discovering the presence of new particles propagating in the loops, in a way similar to how charm and/or top quarks have been discovered.

Moreover, from 2015, I have extended my interests to the phenomenology of axion processes. In 2016, I have made an important theoretical study to constraint the coupling of axion with two photons in view of new experiments, like IAXO. This research has been published in PRL and awarded as editor

suggestion.

My main field of expertise is the treatment of strong interaction effects in hadron decays (strong and/or weak), by using both analytic methods (such as effective theories of HQET and ChPT), and numerical simulations related to the formulation of QCD on the lattice. In addition to QCD, I also extended my expertise to the phenomenology of NP models. Recently, I have studied NP models based on vector-like fermions and leptoquarks for $b \rightarrow s\ell^+\ell^-$ processes which exhibits at LHCb several discrepancies with respect to the SM.

I have also worked on projects of large scale QCD simulations, which includes the use of large computing resources in Europe. In particular, I took care of simulations on the large IBM computing architecture known as Mare Nostrum in Barcelona.

Finally, I have directed a number of PhD students and postdocs and have been PI and Co-PI of several grants.

Keywords:

Effective Theories in the SM and beyond, Flavor Physics, Lattice QCD, B and Kaon Physics, Axion Physics.

Citation Summary:

5050 Citations from Inspire (5920 - Google Scholar, & 2604 - Thomson Reuters ISI).
h-index: 37 (Inspire), 40 (Google Scholar), 29 (Thomson Reuters, ISI).
55 Peer-Reviewed papers. Top Cited Papers (+150): 15.

Invited Contributions and Stays:

24 plenary talks (9 reviews) & 2 conference round tables.

Invited stays at Annecy, Orsay, Mainz (MITP), Munich (MIAPP) and CERN TH institute.

Selected Review Talks:

Explaining B-anomalies, LHCb and Belle II Opportunities for Model Builders, Feb. '19, Mainz (Germany).

Recent Results on Flavor Physics, XIth Quark Confinement, Set. '14, S. Petersburg (Russia).

Review of Flavor Physics, Frontiers of Fundamental Physics '14, July '14, Marseilles (France).

Theory Review in the SM, Kaon13, April '13, Ann Arbor (USA).

Lattice QCD and New Flavor Physics, Recontres de Moriond 2010, March '10, La Thuille (Italy).

Research Achievements:

(2017) - First model for an astrophobic Axion. PRL **Cited: 30**.

(2016) - Redefining the Axion Window, according to theoretical criterium. PRL and editor suggestion **Cited: 73**.

(2013) - First complete calculation of $W_L W_L$ scattering at one-loop order in composite Higgs model. **Cited: 60**.

(2007-10) - Reduction of the theoretical uncertainties for $Br(K \rightarrow \pi\nu\nu)$ by a factor 7, using the isospin breaking corrections at NLO in ChPT and new experimental data in $K \rightarrow \pi\ell\nu$. **Cited: 200**.

(2006) - First calculation of light loops in $K \rightarrow \pi\nu\nu$. Here we completed and amended the effective chiral Lagrangian approach to the problem. **Cited: 200**.

(2005) - First calculation of $K \rightarrow \pi\ell\nu$ form factor $f_+(0)$ on the lattice and (2005-10) phenomenological studies to assess CKM unitarity relation: **Cited: 600**.

(2002) - First calculation at NLO of spectator effects entering the lifetimes of Beauty hadrons and the CP-violating parameters on the B_d system. Recent experimental results from LHCb and B-Factories confirm our theoretical predictions. **Cited: 300**.

Grants:

2 as PI, 2 as Co-PI & 10 as team member.

Conference Organization:

6 as convener of conference session & 5 as member of local organizing committee.

Working Collaborations:

IAXO collaboration; European Twisted Mass Collaboration (ETMC) for Lattice QCD; Kaon Working Group for Kaon Physics.

Academic Responsibilities - "Serveis a la Universitat":

Member of the CPAN-CEC (CPAN - Consejo de Estrategia Científica); Member of the "claustre" of University of Barcelona (2013-18); Member of the "Junta de Facultat" (since 2015); Scientific secretary of ICCUB (since 2015); Member of the "permanent" commission of FQA (since 2015); Co-coordinator of the Theory group teaching duties; Member of the commission of the Master program in Astrophysics, Particle Physics and Cosmology, Universitat de Barcelona; Teaching coordinator for under- and post-graduate courses.

Outreach activities:

Salad of six Flavors with sauce of Higgs, University Open days to promote postgraduate activities of Physics Faculty of Barcelona University.

Student Supervision Activities:

1 Ph.D Thesis as advisor; 4 Ph.D Thesis as co-advisor; 5 Master Thesis.

Education:

University of Rome, "La Sapienza"	ROME, ITALY
Ph.D Degree in Theoretical Physics focused on B physics and perturbative calculations.	2001
Degree in Theoretical Physics focused on numerical simulations of QCD on the lattice.	1998

Experience:

University of Barcelona	BARCELONA
Associate Professor "Serra-Hünter" national funding scheme to stabilize research talent.	Dec. '14
Fixed-term Researcher (Ramon y Cajal) "Ramon y Cajal" tenure-track national funding scheme.	March '09 - Nov. '14
INFN	LNF, FRASCATI, ITALY
Fixed-term Researcher	Dec. '05 - Feb. '09

Recent Publications:

- P. Arnan, A. Crivellin, M. Fedele and F. Mescia, "Generic loop effects of new scalars and fermions in $b \rightarrow s\ell^+\ell^-$," JHEP **1906**, 118 (2019).
- P. Arnan, D. Becirevic, F. Mescia and O. Sumensari, "Probing low energy scalar leptoquarks by the leptonic W and Z couplings," JHEP **1902**, 109 (2019).
- L. Di Luzio, F. Mescia, E. Nardi, P. Panci and R. Ziegler, "Astrophobic Axions," Phys. Rev. Lett. **120**, no. 26, 261803 (2018).
- L. Di Luzio, F. Mescia and E. Nardi, "Redefining the Axion Window," Phys. Rev. Lett. **118**, no. 3, 031801 (2017).
- P. Arnan, D. Espriu and F. Mescia, "Interpreting a 2 TeV resonance in WW scattering," Phys. Rev. D **93**, no. 1, 015020 (2016).

Barcelona, January, 2020

Referees:

- **Prof Domenec Espriu** (U. Barcelona), vr.recerca@ub.edu, phone: +34 934 035 512.
 - **Prof. Gino Isidori** (U. Zurich), isidori@physik.uzh.ch, phone: +41 44 635 5751.
 - **Dr. Damir Becirevic** (Orsay), Damir.Becirevic@th.u-psud.fr, phone: +33 1 6915 7663.
 - **Prof. Vittorio Lubicz**, (Roma Tre), lubicz@fis.uniroma3.it, phone: +39 06 5733 7307.
 - **Dr. Jonathan Flynn**, (Southampton), jflynn@phys.soton.ac.uk, phone: +44 23 8059 2081.
 - **Prof. Guido Martinelli**, (Sapienza), guido.martinelli@roma1.infn.it, phone: +39 06 4991 4234.
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Research Grants

- Title: **Teoría y fenomenología de las interacciones fundamentales: física de partículas y unificación de las fuerzas**
Funding Body: Spanish Ministry of Education.
Period: December 2019 -2021. PI: [REDACTED]. Under evaluation.
- Title: **Teoría y fenomenología de las interacciones fundamentales: física de partículas y unificación de las fuerzas**
Funding Body: Spanish Ministry of Education.
Period: April 2016 -2019. PI: [REDACTED]. Amount: 300k €.
- Title: **Teoría y fenomenología de las interacciones fundamentales: física de partículas y unificación de las fuerzas**
Funding Body: Spanish Ministry of Education.
Period: April 2013 -2016. PI: D. [REDACTED]. Amount: 300k €.
- Title: **Grup consolidat de Física Teòrica d'Altes Energies**
Funding Body: Agència de Gestió d'Ajuts Universitaris i de Recerca. Generalitat de Catalunya.
Period: April 2017 -2020. PI: [REDACTED]: 50k €.
- Title: **ICCUB: Maria de Maetzu**
Funding Body: Spanish Ministry of Education.
Period: April 2015 -2019. PI: [REDACTED]: 2M €.
- Title: **Participación Española en Estructuras Europeas de Investigación en Física de Partículas, Astropartículas y Nuclear (CPAN)**
Funding Body: Spanish Ministry of Education.
Period: April 2019 -2021. PI: [REDACTED]: 60k €.
- Title: **Red Española de Física de Sabor (REFIS)**
Funding Body: Spanish Ministry of Education.
Period: April 2017 -2019. PI: [REDACTED]: 20k €.
- Title: **De la evidencia al descubrimiento de nueva Física en LHC**
Funding Body: Spanish Ministry of Education.
Period: April 2015 -2017. PI: [REDACTED]: 60k €.
- Title: **Grup consolidat de Física Teòrica d'Altes Energies**
Funding Body: Agència de Gestió d'Ajuts Universitaris i de Recerca. Generalitat de Catalunya.
Period: April 2009 -2013. PI: [REDACTED]: 50k €.
- Title: **Funding to organize the conference "International Meeting on Fundamental Physics" (IMFP14).**
Funding Body: CPAN, Spanish Flavor Networks and University of Barcelona.
Period: February 2014. PI: [REDACTED].
- Title: **Flavor Physics in the Standard Model and Beyond**
Funding Body: Ramón y Cajal Program, Spanish Ministry of Education.
Period: from 2009 to 2014. PI: [REDACTED].
- Title: **I3 Program for Excellence in Research Activity**
Funding Body: Spanish Ministry of Education.
Period: April 2013 -2014. PI: [REDACTED]. Amount: 100k €.

- Title: **Teoría y fenomenología de las interacciones fundamentales: Física de partículas y la unificación de las fuerzas**
Funding Body: Spanish Ministry of Education.
Period: April 2011 -2013. PI: [REDACTED].
 - Title: **Kaon Physics on the lattice with up, down, strange and charm dynamical quarks**
Funding Body: Supercomputing Center Mare Nostrum.
Period: from 2010 to 2012. PI: [REDACTED]. Amount 3000k hrs.
 - Title: **QCD Form Factors on the Lattice**
Funding Body: ECT* Trento, Ben-Aurora cluster.
Period: from 2007 to 2008. PI: [REDACTED].
 - Title: **Teoría y fenomenología de las interacciones fundamentales**
Funding Body: Spanish Ministry of Education.
Period: April 2007 -2010. PI: [REDACTED].
 - Title: **QCD Simulations for Flavor Physics in the Standard Model and Beyond**
Funding Body: PRACE, Center Jülich, Germany.
Period: from 2011 to 2012. PI: [REDACTED].
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Professional Activities

- Member of the CPAN-CEC (CPAN - Consejo de Estrategia Científica) since 2019.
 - Organizing Committee member, "International Meeting on Fundamental Physics (IMFP14)" (<http://benasque.org/>, February 3rd -7th 2014 Benasque).
 - Organizer of Theory-Group Xmas meeting at University of Barcelona since 2011, (<http://www.ecm.ub.es/mescia/2011>, Barcelona 21 - 22 December 2011, <http://www.ecm.ub.es/mescia/2012>, Barcelona 19 - 20 December 2012, <http://www.ecm.ub.es/mescia/2013>, Barcelona 18 - 19 December 2013, http://icc.ub.edu/webs/ICCUB_Christmas_Meeting/, Barcelona 18 - 19 December 2014.).
 - Convener of Super B general meeting, (<http://www.cabibbolab.it/index.php/en/science/superb-physics>).
 - Convener of the workshop "CKM 2010", (<http://ckm2010.warwick.ac.uk>, Warwick 6 - 10 Settembre 2010).
 - Convener of the workshop "NA62 Physics Handbook", (<http://na62pb.ph.tum.de/>, CERN 10 - 11 Dicembre 2009).
 - Convener and Summary Speaker of "Flavor Physics" Parallel session, "Annual meeting on High energy physics" (IFAE 07) (<http://ifae2007.na.infn.it/>), Naples April 11 - 13 2007, Italy.
 - Member of the FlaviaNet Kaon Working Group (<http://www.lnf.infn.it/wg/ous/>).
 - Editorial Board Member, KAON 07 (<http://pos.sissa.it/Kaon07>), Frascati May, 21 - 25 2007.
 - Organizing Committee member, "LNF Spring School on Particle Physics": since 2005 (<http://www.lnf.infn.it/conference/lnfss/07/>).
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Student Supervisor Activities

- Ph.D. Thesis, student [REDACTED], University of Barcelona, March 2016 - current.
- Ph.D. Thesis, Dr. [REDACTED], in collaboration with Prof. [REDACTED], University of Barcelona, defense November 2015.
- Ph.D. Thesis, Dr. [REDACTED], in collaboration with Prof. [REDACTED], University of Roma Tre, defense February 2006.
- Ph.D. Thesis, Dr. [REDACTED], in collaboration with Prof. [REDACTED], University of Southampton (UK), defense June 2004.

- Master Thesis, student [REDACTED], University of Bologna/Barcelona, November 2017 - June 2018.
- Master Thesis, student [REDACTED], University of Barcelona, November 2015 - June 2016.
- Master Thesis, student [REDACTED], University of Barcelona, November 2013 - June 2014.
- Master Thesis, student [REDACTED], University of Barcelona, November 2012 - June 2013.
- Master Thesis, student [REDACTED], University of Barcelona, November 2013 - June 2014.
- Master Thesis, student [REDACTED] University of Barcelona, June 2009 - June 2010.
- Master Thesis, student [REDACTED] Abad, University of Barcelona, January 2010 - September 2010.
- Final year Thesis (Tesi di Laurea), student [REDACTED], University of Rome "La Sapienza", January - September 2007.

Teaching Experience

- About 1000 hours teaching from 2009: theory courses and problem classes: at under- and post-graduate level.
- I have always been committed to active teaching at the UB. Students must be the central part of the learning process to which the teacher is a facilitator. I believe that one learns better and faster when seeking knowledge needed to solve problems and by solving the actual problems. The realistic examples derived from my research experience to formulate problems are both a source of motivation to always improve my teaching and adapt it to a given class of students.
- I teach university courses at the master and at two under-graduate degrees of the Faculty of Physics at UB. The subjects at the bachelor's degree are generic the master's are more closely linked to the group's research.
- from 2010/11 to 2019/20:
-**Undergraduate course:** "Mathematical Methods in Physics I (MMFI)", Physics Degree, Physics Faculty, University of Barcelona: 60 hrs every year, **Theory, Problem classes and organization of the course.**
- from 2014/15 to 2019/20:
-**Postgraduate course:** "Gauge Theories of the Standard Model", Physics Faculty, University of Barcelona: 15 hrs every year, **Theory classes.**
- from 2014/15 to 2019/20:
-**Undergraduate course:** "Mathematical Analysis II (CDV)", Biomedical Engineering Degree, Medicine Faculty, UB: 60 hrs every year, **Theory, Problem classes and organization of the course.**
- from 2010/11 to 2013/14:
-**Postgraduate course:** "Standard Model",
Physics Degree, Physics Faculty, University of Barcelona: 30 hrs every year,
- 2012/13: -**Undergraduate course:** "Mathematical Methods in Physics II", Physics Degree, Physics Faculty, University of Barcelona: 20 hrs, **Problem classes.**
- 2012/13: -**Undergraduate course:** "Mathematical Analysis II (CDV)", Physics Degree, Physics Faculty, University of Barcelona: 160 hrs, **Problem classes for several groups.**
- 2010/11:
-**Undergraduate course:** tutorial of "Laboratory of Classical Mechanics", Physics and Engineering Degree, Physics Faculty, University of Barcelona: 32 hrs, tutorial for 1 group.
- 2009/10:
-**Undergraduate course:** "Advanced Mathematical Methods in Physics", Physics Degree, Physics Faculty, University of Barcelona: 30 hrs, **Problem classes.**
- 2003/4:
-**Undergraduate course:** "Classical Mechanics", Department of Physics and Astronomy, University of Southampton, England: 30 hrs, **Problem classes.**
-**Undergraduate course:** "Computational Physics", Department of Physics and Astronomy, University of Southampton, England: 40 hrs, **Problem classes.**

Teaching Material

- *“Introduction to Probability”* (in Catalan), Federico Mescia and Augustí Pérez, Universitat de Barcelona: notes prepared for the course of Mathematical Methods i Physics.
- *“Complex Variables: a collection of solved problems”* (in Catalan), Federico Mescia and Augustí Pérez, Universitat de Barcelona; prepared for the course of Mathematical Methods in Physics.
- *“Probability: a collection of solved problems”* (in Catalan), Prof. Federico Mescia and Augustí Pérez, Universitat de Barcelona; prepared for the course of Mathematical Methods in Physics.
- *“Complex Variables and Probability: Strategic Practice and Homework (solved problems)”* (in Catalan), Federico Mescia, Universitat de Barcelona; prepared for the course of Mathematical Methods in Physics.
- *“The Riemann Surface of $\arg z$ by Lluquet and Rovelló”* (in Catalan), Federico Mescia, Universitat de Barcelona; comics prepared for the course of Mathematical Methods in Physics. Lluquet and Rovelló are two classic characters (two shepherds) of Xmas theatre piece in Catalonia. This is the easier way to introduce to students the Riemann surface of $\arg z$, the so-called spiral staircase.
- *“Analysis in Many Variables: a collection of solved problems”* (in Catalan), Prof. Federico Mescia, Universitat de Barcelona; prepared for the course of Mathematical Analysis II. Many examples worked out in Mathematica.
- *“Advanced Mathematical Methods: a collection of solved problems”* (in Catalan), Prof. Federico Mescia, Universitat de Barcelona; prepared for the course of Advanced Mathematical Methods in Physics. This is a collection of solved problems in Differential Equations by Frobenius method, Sturm-Liouville Theory, Fourier and Laplace Transforms, Bessel and Green Functions. Selected topics also include physical application of partial differential equation: heat and wave equations, theory of elasticity in one dimension in continuum, hanging chain.

Teaching Habilitation

- Qualified to work at the Full and Associate Professor level in Catalunya, issued by Agència Catalana de Qualitat Universitària (AQU), ref: U1145/12514902-118.
- Qualified to work at French Universities as “maître de conférences” & Professor.
- Habilitation of Associate Professor in Italy (since 2013).

Federico Mescia: Publication List

Publications in Refereed Journals

1. F. Björkeroth, L. Di Luzio, F. Mescia and E. Nardi,
“Covert symmetries in the neutrino mass matrix,”
accepted for publication in JHEP [arXiv:1910.00576 [hep-ph]]. 1 citations counted in INSPIRE as of 29 Jan 2020.
2. R. Coy, M. Frigerio, F. Mescia and O. Sumensari,,
“New physics in $b \rightarrow s\ell\ell$ transitions at one loop,”
Eur. Phys. J. C **80**, no. 1, 52 (2020) [arXiv:1909.08567 [hep-ph]]. 1 citations counted in INSPIRE as of 29 Jan 2020.
3. F. Björkeroth, L. Di Luzio, F. Mescia, E. Nardi, P. Panci and R. Ziegler,
“Axion-electron decoupling in nucleophobic axion models,”
accepted for publication in PRD [arXiv:1907.06575 [hep-ph]]. 2 citations counted in INSPIRE as of 29 Jan 2020.
4. E. Armengaud *et al.* [IAXO Collaboration],
“Physics potential of the International Axion Observatory (IAXO),”
JCAP **1906**, 047 (2019) [arXiv:1904.09155 [hep-ph]]. 21 citations counted in INSPIRE as of 29 Jan 2020.
5. P. Arnan, A. Crivellin, M. Fedele and F. Mescia,
“Generic loop effects of new scalars and fermions in $b \rightarrow s\ell^+\ell^-$ and a vector-like 4th generation,”
JHEP **1906**, 118 (2019) [arXiv:1904.05890 [hep-ph]]. 11 citations counted in INSPIRE as of 29 Jan 2020.
6. P. Arnan, D. Becirevic, F. Mescia and O. Sumensari,
“ Probing low energy scalar leptoquarks by the leptonic W and Z couplings,”
JHEP **1902**, 109 (2019) [arXiv:1901.06315 [hep-ph]]. 8 citations counted in INSPIRE as of 29 Jan 2020.
7. F. Björkeroth, L. Di Luzio, F. Mescia and E. Nardi,
“ $U(1)$ flavour symmetries as Peccei-Quinn symmetries,”
JHEP **1902**, 133 (2019) [arXiv:1811.09637 [hep-ph]]. 7 citations counted in INSPIRE as of 29 Jan 2020.
8. L. Di Luzio, F. Mescia, E. Nardi, P. Panci and R. Ziegler,
“Astrophobic Axions,”
Phys. Rev. Lett. **120**, no. 26, 261803 (2018) [arXiv:1712.04940 [hep-ph]]. 26 citations counted in INSPIRE as of 29 Jan 2020.
9. L. Di Luzio, F. Mescia and E. Nardi,
“Window for preferred axion models,”
Phys. Rev. D **96**, no. 7, 075003 (2017) [arXiv:1705.05370 [hep-ph]]. 35 citations counted in INSPIRE as of 29 Jan 2020.
10. L. Di Luzio, F. Mescia and E. Nardi,
“Redefining the Axion Window,”
Phys. Rev. Lett. **118** (2017) no.3, 031801 [arXiv:1610.07593 [hep-ph]]. 75 citations counted in INSPIRE as of 29 Jan 2020.
11. P. Arnan, D. Becirevic, F. Mescia and O. Sumensari,
“Two Higgs doublet models and $b \rightarrow s$ exclusive decays,”
Eur. Phys. J. C **77**, no. 11, 796 (2017) [arXiv:1703.03426 [hep-ph]]. 23 citations counted in INSPIRE as of 29 Jan 2020.

12. P. Arnan, L. Hofer, F. Mescia and A. Crivellin,
"Loop effects of heavy new scalars and fermions in $b \rightarrow s\mu^+\mu^-$,"
 JHEP **1704**, 043 (2017) [arXiv:1608.07832 [hep-ph]]. 64 citations counted in INSPIRE as of 29 Jan 2020.
13. P. Arnan, D. Espriu and F. Mescia,
"Interpreting a 2 TeV resonance in WW scattering,"
 Phys. Rev. D **93**, no. 1, 015020 (2016) [arXiv:1508.00174 [hep-ph]]. 31 citations counted in INSPIRE as of 29 Jan 2020.
14. D. Espriu, F. Mescia and A. Renau,
"Axion-Higgs interplay in the two Higgs-doublet model,"
 Phys. Rev. D **92**, no. 9, 095013 (2015) [arXiv:1503.02953 [hep-ph]]. 5 citations counted in INSPIRE as of 29 Jan 2020.
15. D. Espriu, F. Mescia
"Unitarity and causality constraints in composite Higgs models,"
 Phys. Rev. D **90**, 055002 (2014) [arXiv:1403.7386 [hep-ph]]. 42 citations counted in INSPIRE as of 29 Jan 2020.
16. D. Espriu, F. Mescia and B. Yencho,
"Radiative corrections to WL WL scattering in composite Higgs models,"
 Phys. Rev. D **88**, 055002 (2013) [arXiv:1307.2400 [hep-ph]]. 59 citations counted in INSPIRE as of 29 Jan 2020.
17. V. Bertone, N. Carrasco, M. Ciuchini, P. Dimopoulos, R. Frezzotti, V. Gimenez, V. Lubicz and G. Martinelli *et al.*,
"Kaon Mixing Beyond the SM from $N_F = 2$ tmQCD and model independent constraints from the UTA,"
 JHEP **1303**, 089 (2013) [arXiv:1207.1287 [hep-lat]]. 87 citations counted in INSPIRE as of 29 Jan 2020.
18. F. Mescia and J. Virto,
"Natural SUSY and Kaon Mixing in view of recent results from Lattice QCD,"
 Phys. Rev. D **86**, 095004 (2012) [arXiv:1208.0534 [hep-ph]]. 35 citations counted in INSPIRE as of 29 Jan 2020.
19. D. Becirevic, N. Kosnik, F. Mescia and E. Schneider,
"Complementarity del constraints on New Physics from $B_s \rightarrow \mu^+\mu^-$ and from $B \rightarrow Kl^+l^-$ decays,"
 Phys. Rev. D **86**, 034034 (2012) [arXiv:1205.5811 [hep-ph]]. 61 citations counted in INSPIRE as of 29 Jan 2020.
20. J. Matias, F. Mescia, M. Ramon and J. Virto,
*"Complete Anatomy of $\bar{B}_d \rightarrow \bar{K}^{*0}(\rightarrow K\pi)l^+l^-$ and its angular distribution,"*
 JHEP **1204**, 104 (2012) [arXiv:1202.4266 [hep-ph]]. 170 citations counted in INSPIRE as of 29 Jan 2020.
21. T. Hapola, F. Mescia, M. Nardecchia and F. Sannino,
"Pseudo Goldstone Bosons Phenomenology in Minimal Walking Technicolor,"
 Eur. Phys. J. C **72**, 2063 (2012) [arXiv:1202.3024 [hep-ph]]. 5 citations counted in INSPIRE as of 29 Jan 2020.
22. P. Dimopoulos, F. Mescia and A. Vladikas,
" K^ vector and tensor couplings from $N_f = 2$ tmQCD,"*
 Phys. Rev. D **84**, 014505 (2011) [arXiv:1104.0188 [hep-lat]]. 2 citations counted in INSPIRE as of 29 Jan 2020.
23. D. Espriu, F. Mescia and A. Renau,
"Axions and high-energy cosmic rays: Can the relic axion density be measured?,"
 JCAP **1108**, 002 (2011) [arXiv:1010.2589 [hep-ph]]. 7 citations counted in INSPIRE as of 29 Jan 2020.
24. M. Constantinou *et al.* [ETM Collaboration],
" B_K -parameter from $N_f = 2$ twisted mass lattice QCD,"
 Phys. Rev. D **83** (2011) 014505 [arXiv:1009.5606 [hep-lat]]. 56 citations counted in INSPIRE as of 29 Jan 2020.

25. M. Antonelli *et al.*,
"An evaluation of $|V_{us}|$ and precise tests del Standard Model from world data on leptonic and semileptonic kaon decays,"
 Eur.Phys.J.C69:399-424,2010, arXiv:1005.2323 [hep-ph]. 272 citations counted in INSPIRE as of 29 Jan 2020.
26. A.A. Andrianov, D. Espriu, F. Mescia, A. Renau,
"The Axion Shield,"
 Phys. Lett. B **684**, 101-105 (2010) arXiv:0907.5158 [hep-ph]. 23 citations counted in INSPIRE as of 29 Jan 2020.
27. G. Amelino-Camelia *et al.*,
"Physics with the KLOE-2 experiment at the upgraded DAΦNE,"
 Eur. Phys. J. C **68**, 619 (2010) [arXiv:1003.3868 [hep-ex]]. 1 citations counted in INSPIRE as of 29 Jan 2020.
28. G. Corcella and F. Mescia,
"A Phenomenological Study of Bottom Quark Fragmentation in Top Quark Decay at Hadron Colliders,"
 Eur. Phys. J. C **65**, 171-180 (2010) arXiv:0907.5158 [hep-ph]. 20 citations counted in INSPIRE as of 29 Jan 2020.
29. M. Antonelli *et al.*,
"Flavor Physics in the Quark Sector,"
 Phys. Rept. **494** (2010) 197 [arXiv:0907.5386 [hep-ph]]. 311 citations counted in INSPIRE as of 29 Jan 2020.
30. V. Lubicz, F. Mescia, S. Simula, C. Tarantino ETM collaboration,
"K → pion Semileptonic Form Factors from Two-Flavor Lattice QCD,"
 Phys. Rev. D **80**, 111502 (2009) arXiv:0906.4728 [hep-lat]. 66 citations counted in INSPIRE as of 29 Jan 2020.
31. B. Blossier *et al.* ETM collaboration,
"Pseudoscalar decay constants of kaon and D-mesons from $N_F = 2$ twisted mass Lattice QCD,"
 JHEP **0907**, 043 (2009) [arXiv:0904.0954 [hep-lat]]. 145 citations counted in INSPIRE as of 29 Jan 2020.
32. T. Hurth, G. Isidori, J. F. Kamenik and F. Mescia,
"Constraints on New Physics in MFV models: a model-independent analysis of $\Delta F = 1$ processes,"
 Nucl. Phys. B **808**, 326 (2009) [arXiv:0807.5039 [hep-ph]]. 132 citations counted in INSPIRE as of 29 Jan 2020.
33. J. F. Kamenik and F. Mescia,
"B → Dτν Branching Ratios: Opportunity for Lattice QCD and Hadron Colliders,"
 Phys. Rev. D **78**, 014003 (2008) [arXiv:0802.3790 [hep-ph]]. 170 citations counted in INSPIRE as of 29 Jan 2020.
34. The FlaviaNet Kaon Working: M. Antonelli, V. Cirigliano, P. Franzini, S. Glazov, R. Hill, G. Isidori, F. Mescia, M. Moulson, M. Palutan, E. Passemar, M. Piccini, M. Veltri, O. Yushchenko, R. Wanke. (<http://www.lnf.infn.it/wg/vus>)
"Precision tests del Standard Model with leptonic and semileptonic kaon decays,"
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 Phys. Rev. D **75**, 115019 (2007) [arXiv:hep-ph/0703035]. 119 citations counted in INSPIRE as of 29 Jan 2020.
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“*Exploring the Flavor structure del MSSM with rare K decays,*”
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“*Operator product expansion and quark condensate from lattice QCD in coordinate space,*”
Eur. Phys. J. C(2005). e-Print Archive: hep-lat/0503001. 60 citations counted in INSPIRE as of 29 Jan 2020.
46. D. Becirevic, G. Isidori, V. Lubicz, G. Martinelli, F. Mescia, S. Simula, C. Tarantino, G. Villadoro,
“*The $K \rightarrow \pi$ vector form factor at zero momentum transfer on the lattice,*”
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“*Sea quark effects in B_K from $N_F = 2$ clover-improved Wilson fermions,*”
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“*Lifetime differences and CP violation parameters of neutral B mesons at the next-to-leading order in QCD,*”
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50. D. Becirevic, V. Lubicz, F. Mescia and C. Tarantino,
“*Coupling del light vector meson to the vector and to the tensor current,*”
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"Next-to-leading order QCD corrections to spectator effects in lifetimes of beauty hadrons"
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"Non-perturbatively Improved Heavy-Light Mesons: Masses and Decay Constants"
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"Non-perturbatively Renormalized Light-Quark Masses with the Alpha Action"
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"Complementarity of $B_s \rightarrow \mu^+ \mu^-$ and $B \rightarrow Kl^+ l^-$ in New Physics searches,"
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2. P. Dimopoulos *et al.*,
"K-meson vector and tensor decay constants and BK-parameter from Nf=2 tmQCD,"
 PoS LATTICE2008, 271 (2008) [arXiv:0810.2443 [hep-lat]].
3. F. Mescia,
"Precision tests with $K_{\ell 3}$ and K_{12} decays,"
 arXiv:0710.5620. Proceedings at EPS International Europhysics Conference on High-Energy Physics (HEP-EPS 2007), Manchester, England, 19-25 Luglio 2007.
4. D. Becirevic, B. Haas and F. Mescia,
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5. F. Mescia,
"Non-perturbative inputs for Flavor physics,"
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6. F. Mescia,
"Rare kaon decays $K \rightarrow \pi \nu \bar{\nu}$ and $K_L \rightarrow \pi^0 \ell^+ \ell^-$,"
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9. F. Mescia,
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10. V. Gimenez, V. Lubicz, F. Mescia, V. Porretti and J. Reyes,
"Operator product expansion and quark condensate from LQCD in coordinate space,"
 PoS **LAT2005**, 081 (2006) [arXiv:hep-lat/0510090]. Proceedings del 23rd International Symposium on Lattice Field Theory (Lattice 2005), Dublin, Ireland, 25-30 Luglio 2005.
11. F. Mescia, V. Gimenez, V. Lubicz, G. Martinelli, S. Simula and C. Tarantino,
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12. D. Becirevic, G. Isidori, V. Lubicz, G. Martinelli, F. Mescia, S. Simula and C. Tarantino
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14. J. M. Flynn, F. Mescia and A. S. B. Tariq,
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15. A. Abada, D. Becirevic, P. Boucaud, J. M. Flynn, J. P. Leroy, V. Lubicz and F. Mescia,
"Heavy to light vector meson semileptonic decays,"
 Nucl. Phys. Proc. Suppl. **119**, 625 (2003) [arXiv:hep-lat/0209116]. Proceedings of 20th International Symposium on Lattice Field Theory (LATTICE 2002), Boston, Massachusetts, 24-29 Giugno 2002.
16. F. Mescia,
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17. A. Abada, D. Becirevic, P. Boucaud, J. P. Leroy, V. Lubicz, G. Martinelli and F. Mescia,
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C. Congressos

C.1 Xerrades com a conferenciant convidat

23) Autores/as: F. Mescia

Títol: Recent Results on Flavour Physics

Tipus de contribució: comunicació oral en sessió plenària- Conferència invitada

Congrés: Xlth Quark Confinement and the Hadron Spectrum (ConXI)

Publicació: en preparació

Lloc: Saint Petersburg, Rússia

Any: 8 - 12 Setembre, 2014

HomePage Conferència: <http://phys.spbu.ru/confxi.html>

Programa de la Conferència: <http://phys.spbu.ru/confxi/scientific-program.html>

Enllaç a la xerrada: <https://indico.cern.ch/event/287920/session/62/contribution/214/material/slides/0.pdf>

Organisme/institució que l'organitza: [St Petersburg State, Polytechnic University](#), Dubna

22) Autores/as: F. Mescia

Títol: Review of Flavour Physics

Tipus de contribució: comunicació oral en sessió plenària- Conferència invitada

Congrés: Frontiers of Fundamental Physics 14 (FFP14)

Publicació: en preparació

Lloc: Marsella, França

Any: 15 - 18 Juliol, 2014

HomePage Conferència: <http://ffp14.cpt.univ-mrs.fr/>

Programa de la Conferència: <http://ffp14.cpt.univ-mrs.fr/index.php?page=plenary2>

Enllaç a la xerrada: http://ffp14.cpt.univ-mrs.fr/DOCUMENTS/SL_DES/MESCIA_Federico.pdf

Organisme/institució que l'organitza: [Aix-Marseille, Université](#)

21) Autores/as: F. Mescia

Títol: Unitarity and causality constraints in composite Higgs models

Tipus de contribució: comunicació oral en sessió paral·lela - Conferència invitada

Congrés: ICHEP14

Publicació: en preparació

Lloc: València, Espanya

Any: 2 - 9 Juliol, 2014

HomePage Conferència: <http://ichep2014.es/>

Programa de la Conferència: <http://ichep2014.es/scientific-program>

Enllaç a la xerrada: <https://indico.ific.uv.es/indico/conferenceOtherViews.py?view=standard&confid=2025>

Organisme/institució que l'organitza: [Institut de Física Corpuscular \(IFIC\)](#), CSIC, Universitat de València

20) Autores/as: F. Mescia

Títol: Theory Review

Tipus de contribució: comunicació oral en sessió plenària - Conferència invitada

Congrés: KAON13

Publicació: en preparació.

Lloc: Ann Arbor, Estats Units of Amèrica

Any: 29 Abril - 1 Maig, 2013

HomePage Conferència: <http://kaon13.physics.lsa.umich.edu/>

Programa de la Conferència: <http://kaon13.physics.lsa.umich.edu/program/scientific-program>

Enllaç a la xerrada: <http://kaon13.physics.lsa.umich.edu/program/scientific-program/theory-review>

Organisme/institució que l'organitza: [University of Michigan](#), Estats Units of Amèrica

19) Autores/as: F. Mescia

Títol: b \rightarrow s transitions and Lattice QCD

Tipus de contribució: comunicació oral en sessió plenària - Conferència invitada

Congrés: Portoroz 2013: Probing the Standard Model and New Physics at Low and High Energies

Publicació: en preparació

Lloc: Portoroz, Eslovènia

Any: 14-18 Abril, 2013

HomePage Conferència: <http://hepworkshop.ijs.si/2013/>

Programa de la Conferència: <http://indico.cern.ch/conferenceDisplay.py?ovw=True&confId=217621>

Enllaç a la xerrada: <http://indico.cern.ch/getFile.py/access?contribId=16&sessionId=16&resId=0&materialId=slides&confId=217621>

Organisme/institució que l'organitza: [Institut Jožef Stefan](#), Eslovènia

18) Autores/as: F. Mescia

Títol: Form factors on the Lattice for B \rightarrow K^(*) ℓ , K^{*} γ

Tipus de contribució: comunicació oral en sessió plenària - Conferència invitada

Congrés: Third Workshop on Flavour Physics in the LHC Era: Theoretical and Experimental Views

Publicació: no era obligatori preparar actes de conferència

Lloc: València, Espanya

Any: 4-6 Febrer, 2013

HomePage Conferència: <http://indico.ific.uv.es/indico/conferenceDisplay.py?confId=722>

Programa de la Conferència: <http://indico.ific.uv.es/indico/conferenceOtherViews.py?showSession=all&showDate=all&view=standard&fr=no&confId=722>

Enllaç a la xerrada: <http://indico.ific.uv.es/indico/getFile.py/access?contribId=30&sessionId=9&resId=0&materialId=slides&confId=722>

Organisme/institució que l'organitza:

[IFIC](#), PROMETEO/2010-056 project and the Spanish Flavour Physics Network

17) Autores/as: F. Mescia

Títol: Complementarity of the constraints on New Physics from Bs \rightarrow $\mu^+ \mu^-$ and from B \rightarrow K $\ell^+ \ell^-$ decays

Tipus de contribució: comunicació oral en sessió plenària - Conferència invitada

Congrés: QCD 12

Publicació: <http://arxiv.org/abs/arXiv:1209.0969>

Lloc: Montpellier, França

Any: 2-6 Juliol, 2012

HomePage Conferència: <http://www.lpta.univ-montp2.fr/users/qcd/qcd2012/qcd12/Welcome.html>

Programa de la Conferència: <http://www.lpta.univ-montp2.fr/users/qcd/prog12.html>

Enllaç a la xerrada: http://www.lpta.univ-montp2.fr/users/qcd/qcd12_talks/tuesday/mescia.pdf

Organisme/institució que l'organitza:

[CNRS, IN2P3](#) (França)

16) Autores/as: F. Mescia

Títol: Lattice for Flavour Physics

Tipus de contribució: comunicació oral en sessió plenària – Conferència invitada

Congrés: SuperB meeting

Publicació: no era obligatori preparar actes de conferència.

Lloc: Benasque, Espanya

Any: 18-21 Gener, 2011

HomePage Conferència: <http://benasque.org/2011superb/>

Programa de la Conferència: <http://benasque.org/2011superb/cgi-bin/talks/allprint.pl>

Enllaç a la xerrada: http://benasque.org/2011superb/talks_contr/212_Mescia_Benasque11.pdf

Organisme/institució que l'organitza:

[CSIC, Ministerio de Ciencia e Innovación, Centro de Benasque Pedro Pascual](#) (Espanya)

15) Autores/as: F. Mescia

Títol: Lattice QCD and New Flavour Physics

Tipus de contribució: comunicació oral en sessió plenària – Conferència invitada

Congrés: Recontres de Moriond 2010

Publicació: no era obligatori preparar actes de conferència.

Lloc: La Thuille, Itàlia

Any: 6-13 Març 2010

HomePage Conferència: <http://indico.in2p3.fr/conferenceDisplay.py?confid=2065>

Programa de la Conferència: <http://indico.in2p3.fr/getFile.py/Accés?resId=3&materialId=4&confid=2065>

Enllaç a la xerrada:

<http://indico.in2p3.fr/getFile.py/Accés?contribId=12&sessionId=3&resId=0&materialId=slides&confid=2065>

Organisme/institució que l'organitza:

[CNRS, IN2P3, CEA/IRFU, CNES](#) (França)

[FNRS, Belgian Science Policy](#) (Belgique)

14) Autores/as: F. Mescia

Títol: Constraints on minimal flavour violation.

Tipus de contribució: comunicació oral en sessió plenària - Conferència invitada

Congrés: Topical Workshop: Low energy constraints on extensions of the Standard Model

Publicació: Acta Phys.Polon.Supp.3:103-108,2010

Lloc: Kazimierz, Polònia

Any: 23-27 Juliol 2009.

HomePage Conferència: <http://czyk.phys.us.edu.pl/>

Programa de la Conferència: <http://czyk.phys.us.edu.pl/>

Enllaç a la xerrada: http://czyk.phys.us.edu.pl/talks/25_07_2009/Mescia_Flavianet.pdf

Organisme/institució que l'organitza:

[Institute of Physics](#), University of Silesia (Katowice)

[Faculty of Physics](#), University of Warsaw

dins del "[Marie Curie Research Training Network](#)", [Flavianet](#)

13) Autores/as: F. Mescia

Títol: Lattice determination of the Kaon form factors from ETMC

Tipus de contribució: *comunicació oral en sessió plenària - Conferència invitada*

Congrés: KAON 09

Publicació: [PoS KAON09:028,2009](#).

Lloc: Tsukuba (JAPÓN)

Any: .09-12 Juny, 2009

HomePage Conferència: <http://kaon09.kek.jp/>

Programa de la Conferència: <http://kaon09.kek.jp/sci/conferenceDisplay.py.html>

Enllaç a la xerrada: http://kaon09.kek.jp/sci/pdf/Mescia_KAON09.pdf

Organisme/institució que l'organitza:

[High Energy Accelerator Research Organization \(KEK\)](#), Japan

[The Physical Society of Japan \(JPS\)](#), [J-PARC Center](#)

12) Autores/as: F. Mescia

Títol: Model-Independent Constraints on New Physics in MFV Models

Tipus de contribució: *comunicació oral en sessió plenària - Conferència invitada*

Congrés: Interplay of Collider and Flavour Physics

Publicació: no era obligatori preparar actes de conferència.

Lloc: CERN, Geneva

Any: .16-18 Març, 2009

HomePage Conferència: <http://indico.cern.ch/conferenceDisplay.py?confid=47961>

Programa de la Conferència: <http://indico.cern.ch/conferenceOtherViews.py?view=cdsagenda&confid=47961>

Enllaç a la xerrada:

<http://indico.cern.ch/materialDisplay.py?contribId=5&sessionId=10&materialId=slides&confid=47961>

Organisme/institució que l'organitza: [CERN](#)

11) Autores/as: F. Mescia

Títol: Theory Review of Kaon Physics

Tipus de contribució: *comunicació oral en sessió plenària - Conferència invitada*

Congrés: Flavor Physics and CP Violation (FPCP 08)

Publicació: no era obligatori preparar actes de conferència.

Lloc: Taipei (TAIWÁN)

Any: .5-9 Maig, 2008

HomePage Conferència: <http://hep1.phys.ntu.edu.tw/fpcp08/>

Programa de la Conferència: <http://hep1.phys.ntu.edu.tw/fpcp08/>

Enllaç a la xerrada: <http://hep1.phys.ntu.edu.tw/fpcp08/may6/charm-kaon-i/KAON-FPCP08.pdf>

Organisme/institució que l'organitza: [Physics Department, National Taiwan University, Taipei](#)

10) Autores/as: F. Mescia

Títol: Precision Tests from Kaon Decays

Tipus de contribució: *comunicació oral en sessió paral·lela - Conferència invitada*

Congrés: Incontri di Fisica delle Alte Energie (IFAE 08)

Publicació: Nuovo Cim. B123 (2008) 847-850

Lloc: Bolonya, Itàlia

Any: 26-28 Març, 2008

HomePage Conferència: <http://ifae2008.bo.infn.it>

Programa de la Conferència: <http://www.bo.infn.it/MaKaC/conferenceOtherViews.py?view=standard&confid=392>

Enllaç a la xerrada: <http://www.bo.infn.it/MaKaC/getFile.py/access?contribId=65&sessionId=3&resId=1&materialId=slides&confid=392>

Organisme/institució que l'organitza: [Universit  di Bologna](#), [INFN](#)

9) Autores/as: F. Mescia

T toll: Precision tests with K_{l3} and K_{l2} decays.

Tipus de contribució: *comunicaci  oral en sessi  paral lela - Confer ncia invitada*

Congr s: International Europhysics Conference on High Energy Physics (EPS-HEP2007)

Publicaci : J.Phys.Conf.Ser.110:052036,2008.

Lloc: Manchester, UK

Any: .19-25 Juliol, 2007

HomePage Confer ncia: <http://www.hep.man.ac.uk/HEP2007/>

Programa de la Confer ncia: <http://agenda.hep.man.ac.uk/conferenceOtherViews.py?view=standard&confid=70>

Enlla  a la xerrada:

<http://agenda.hep.manchester.ac.uk/materialDisplay.py?contribId=374&sessionId=2&materialId=slides&confid=70>

Organisme/institució que l'organitza:

[The University of Manchester](#).

[Institute for Particle Physics Phenomenology at the University of Durham](#), [European Physical Society](#)

8) Autores/as: F. Mescia

T toll: Xerrada de Resum de la Sessi  de F sica de Sabor

Tipus de contribució: *comunicaci  oral en sessi  plen ria - Confer ncia invitada*

Congr s: Incontri di Fisica delle Alte Energie (IFAE07)

Publicaci : no era obligatori preparar actes de confer ncia.

Lloc: N pols, It lia

Any: .11-23 Abril 2007

HomePage Conferència: <http://ifae2007.na.infn.it/>

Programa de la Conferència: http://ifae2007.na.infn.it/Programma_Napoli_IFAE2007.pdf

Enllaç a la xerrada:

<http://indico.cern.ch/materialDisplay.py?contribId=26&sessionId=6&materialId=slides&confId=14815>

Organisme/institució que l'organitza:

[Universit  di Napoli, Federico II](#), [Istituto Nazionale di Fisica Nucleare \(INFN\)](#)

7) Autores/as: F. Mescia

T toll: The impact of rare K decays in New Physics searches

Tipus de contribuci : *comunicaci  oral en sessi  paral lela - Confer ncia invitada*

Congr s: 4th International Workshop on the CKM Unitarity Triangle (CKM06)

Publicaci : no era obligatori preparar actes de confer ncia.

Lloc: Nagoya (Jap )

Any: .12-16 Desembre, 2006

HomePage Confer ncia: <http://ckm2006.hepl.phys.nagoya-u.ac.jp/>

Programa de la Confer ncia: http://ckm2006.hepl.phys.nagoya-u.ac.jp/PDF/Program_daybyday.pdf

Enlla  a la xerrada: <http://agenda.hepl.phys.nagoya-u.ac.jp/materialDisplay.py?contribId=10&sessionId=7&materialId=slides&confId=6>

Organisme/institució que l'organitza:

[Nagoya University](#), [KEK](#)

6) Autores/as: F. Mescia

T toll: $b \rightarrow s$ exclusive form factors from Lattice

Tipus de contribuci : *comunicaci  oral en sessi  paral lela - Confer ncia invitada*

Congr s: 4th International Workshop on the CKM Unitarity Triangle (CKM06)

Publicaci : no era obligatori preparar actes de confer ncia.

Lloc: Nagoya (Jap )

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HomePage Confer ncia: <http://ckm2006.hepl.phys.nagoya-u.ac.jp/>

Programa de la Confer ncia: http://ckm2006.hepl.phys.nagoya-u.ac.jp/PDF/Program_daybyday.pdf

Enlla  a la xerrada: <http://agenda.hepl.phys.nagoya-u.ac.jp/getFile.py?access?contribId=14&sessionId=2&resId=0&materialId=slides&confId=11>

Organisme/institució que l'organitza:

[Nagoya University](#), [KEK](#)

5) Autores/as: F. Mescia

T toll: Rare Kaon Decays $K \rightarrow \pi \nu \nu$ and $KL \rightarrow \pi \ell^+ \ell^-$

Tipus de contribuci : *comunicaci  oral en sessi  paral lela - Confer ncia invitada*

Congr s: EPS International Europhysics Conference on High-Energy Physics (EPS-HEP 2005)

Publicaci : PoS HEP2005, 267 (2006) [arXiv:hep-ph/0512142]

Lloc: Lisboa, Portugal

Any: .21-27 Juliol, 2005

HomePage Confer ncia: <http://www.lip.pt/events/2005/hep2005/>

Programa de la Confer ncia: <http://www.lip.pt/events/2005/hep2005/Programa/session12.html>

Enlla  a la xerrada: http://www.lip.pt/events/2005/hep2005/abstracts/HEP2005_abstract_023.pdf

Organisme/institució que l'organitza:

[Laboratório de Instrumentação e Física Experimental de Partículas](#), [European Physical Society](#)

4) Autores/as: F. Mescia

Títol: Theory Overview of B Lifetimes and Mixing

Tipus de contribució: comunicació oral en sessió paral·lela - Conferència invitada

Congrés: 20th International Workshop on Weak Interactions and Neutrinos (WIN 05)

Publicació: no era obligatori preparar actes de conferència.

Lloc: Delphi, Grècia

Any: .6-11 Juny, 2005

HomePage Conferència: <http://conferences.phys.uoa.gr/win05/>

Programa de la Conferència: http://conferences.phys.uoa.gr/win05/win05_programme.htm

Enllaç a la xerrada: http://conferences.phys.uoa.gr/win05/WIN05_WG2/Day1/W.N05_Mescia4.pdf

Organisme/institució que l'organitza: [University of Athens, Physics Department](#)

3) Autores/as: F. Mescia

Títol: V_{us} from K_{l3} decays

Tipus de contribució: comunicació oral en sessió paral·lela - Conferència invitada

Congrés: 32nd International Conference on High Energy Physics (ICHEP 04)

Publicació: Beijing 2004, ICHEP 2004, vol. 2 813-816 [<http://arxiv.org/abs/hep-lat/0411016>]

Lloc: Pequín, Xina

Any: .16-22 Agost, 2004

HomePage Conferència: <http://ichep04.ihep.ac.cn/>

Programa de la Conferència: http://ichep04.ihep.ac.cn/8_cp.htm#cp3

Enllaç a la xerrada: http://www.ihep.ac.cn/data/ichep04/ppt/8_cp/8-0445-mescia-f.pdf

Organisme/institució que l'organitza: [Institute of High Energy Physics Chinese Academy of Sciences](#)

2) Autores/as: F. Mescia

Títol: Sea quark effects on B_K from $N_F=2$ clover-improved Wilson fermions

Tipus de contribució: comunicació oral en sessió paral·lela - Conferència invitada

Congrés: 32nd International Conference on High Energy Physics (ICHEP 04)

Publicació: Beijing 2004, ICHEP 2004, vol. 2 900-901 [Nucl.Phys.Proc.Suppl. 140 (2005) 359-361]

Lloc: Pequín, Xina

Any: .16-22 Agost, 2004

HomePage Conferència: <http://ichep04.ihep.ac.cn/>

Programa de la Conferència: http://ichep04.ihep.ac.cn/7_quantum.htm

Enllaç a la xerrada: http://www.ihep.ac.cn/data/ichep04/ppt/7_quantum/7-0877-mescia-f.pdf

Organisme/institució que l'organitza: [Institute of High Energy Physics Chinese Academy of Sciences](#)

1) Autores/as: F. Mescia

Títol: Lifetimes of Beauty Hadrons

Tipus de contribució: comunicació oral en sessió paral·lela - Conferència invitada

Congrés: 13th Conference on LEP Physics (LEPTRE 2001)

Publicació: LEP physics. Proceedings, LEPTRE 2001, p263-266

Lloc: Roma, Itàlia

Any: .18-20 Abril, 2001

HomePage Conferència: <http://www.roma3.infn.it/leptre/index.html>

Programa de la Conferència: <http://www.roma3.infn.it/leptre/index.html>

Enllaç a la xerrada: <http://www.roma3.infn.it/leptre/presentazioni/mescia.ppt>

Organisme/institució que l'organitza: [INFN](#), [University of Rome Tre](#)

C.2 Xerrades d'Outreach

[Amanida de sis sabors a la vinagreta de Higgs \(en Català\) \(pdf\) \(ppt\)](#): Federico Mescia, Universitat de Barcelona; xerrada preparada per al dia de promoció del màster en Astrofísica, Física de Partícules i Cosmologia, Facultat de Física, Universitat de Barcelona.

C.3 Altres Seminaris

Al llarg dels anys, tanmateix com a conferenciant convidat, he presentat els meus articles com a "contributed talks" a conferències de Lattice QCD [2005 \(Dublín\)](#), [2004 \(Fermilab, Chicago\)](#), [2002 \(MIT, Boston\)](#) o Workshop de Fenomenologia [KLOE2 2009](#), [Desy, Zeuthen 2003](#), [Southampton 2002](#).

A més he donat moltes xerrades a Universitats i Centre de recerca internacionals com CNRS Annecy (2019), Frascati (2013-2019), U. de Glasgow (2013, 2008), CP³-Origins (U. d'Odense, 2011), UAB (2010), CNRS Marseille (2010), U. d'Edimburg (2004), U. de Liverpool (2004), U. de Bonn (2010), U. Roma "Tor Vergata" (2007,2018), U. de Pavia (2008) i de Catania (2006), Universitat de Montpellier 2 (2013), Institut Josef Stefan Ljubjana (2014).