

Publications

- 2005 D. Bećirević, B. Blossier, Ph. Boucaud, G. Herdoiza, J.P. Leroy, A. Le Yaouanc, V. Morénas, O. Pène,
”*Lattice measurement of the Isgur-Wise functions $\tau_{1/2}$ and $\tau_{3/2}$* ”,
Phys. Lett. B **609**, 298 (2005) [hep-lat/0406031]
- 2006 D. Bećirević, B. Blossier, Ph. Boucaud, V. Gimenez, V. Lubicz, F. Mescia, S. Simula and C. Tarantino,
”*Non-perturbatively renormalized light quark masses from a lattice simulation at $N_f = 2$* ”,
Nucl. Phys. B **734**, 138 (2006) [hep-lat/0510014]
- B. Blossier, A. Le Yaouanc, V. Morénas and O. Pène,
”*Lattice renormalization of the static quark derivative operator*”,
Phys. Lett. B **632**, 319 (2006) [hep-lat/0507024]
- 2007 B. Blossier,
”*Lattice renormalisation of $\mathcal{O}(a)$ improved heavy-light operators*”,
Phys. Rev. D **76**, 114513 (2007) [arXiv:0705.4574]
- I. Bigi, B. Blossier, A. Le Yaouanc, L. Oliver, A. Oyanguren, O. Pène, J. C. Raynal and P. Roudeau,
”*Memorino on the ‘1/2 vs. 3/2 Puzzle’ in $\bar{B} \rightarrow l\bar{\nu}X_c$ – a Year Later and a Bit Wiser*”,
Eur. Phys. J C **52**, 975 (2007) [arXiv:0708.1621]
- 2008 B. Blossier *et al.* [European Twisted Mass Collaboration],
”*Light quark masses and pseudoscalar decay constants from $N_f=2$ Lattice QCD with twisted mass fermions*”,
JHEP **0804**, 020 (2008) [arXiv:0709.4574 [hep-lat]].
- C. Alexandrou *et al.* [European Twisted Mass Collaboration],
”*Light baryon masses with dynamical twisted mass fermions*”,
Phys. Rev. D **78**, 014509 (2008) [arXiv:0803.3190 [hep-lat]].

- 2009 B. Blossier, M. Della Morte, G. von Hippel, T. Mendes and R. Sommer,
 ”On the generalized eigenvalue method for energies and matrix elements in lattice field theory”,
 JHEP **0904**, 094 (2009) [arXiv:0902.1265 [hep-lat]].
- B. Blossier, O. Pene and M. Wagner [European Twisted Mass Collaboration],
 ”Lattice calculation of the Isgur-Wise functions $\tau_{1/2}$ and $\tau_{3/2}$ with dynamical quarks”,
 JHEP **0906**, 022 (2009) [arXiv:0903.2298 [hep-lat]].
- 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]].
- D. Becirevic, B. Blossier, E. Chang and B. Haas,
 ” $g(B^*B\pi)$ -coupling in the static heavy quark limit”,
 Phys. Lett. B **679**, 231 (2009) [arXiv:0905.3355 [hep-ph]].
- 2010 B. Blossier *et al.* [ETM Collaboration],
 ”A proposal for B-physics on current lattices”,
 JHEP **1004**, 049 (2010) [arXiv:0909.3187 [hep-lat]].
- B. Blossier, M. della Morte, N. Garron and R. Sommer,
 ”HQET at order $1/m$: I. Non-perturbative parameters in the quenched approximation”,
 JHEP **1006**, 002 (2010) [arXiv:1001.4783 [hep-lat]].
- B. Blossier, M. Della Morte, N. Garron, G. von Hippel, T. Mendes, H. Simma
 and R. Sommer [Alpha Collaboration],
 ”HQET at order $1/m$: II. Spectroscopy in the quenched approximation”,
 JHEP **1005**, 074 (2010) [arXiv:1004.2661 [hep-lat]].
- B. Blossier, Ph. Boucaud, F. De Soto, V. Morénas, M. Gravina, O. Pène
 and J. Rodriguez-Quintero [ETM Collaboration],
 ”Ghost-gluon coupling, power corrections and $\Lambda_{\overline{MS}}$ from twisted-mass lattice QCD at $N_f=2$ ”,
 Phys. Rev. D **82**, 034510 (2010) [arXiv:1005.5290 [hep-lat]].
- B. Blossier, M. Della Morte, N. Garron, G. von Hippel, T. Mendes, H. Simma
 and R. Sommer [ALPHA Collaboration],
 ”HQET at order $1/m$: III. Decay constants in the quenched approximation”,
 JHEP **1012**, 039 (2010) [arXiv:1006.5816 [hep-lat]].
- B. Blossier *et al.* [ETM Collaboration],
 ”Average up/down, strange and charm quark masses with $N_f=2$ twisted mass lattice QCD”,
 Phys. Rev. D **82**, 114513 (2010) [arXiv:1010.3659 [hep-lat]].

- 2011 B. Blossier, Ph. Boucaud, M. Brinet, F. De Soto, Z. Liu, V. Morénas, O. Pène, K. Petrov and J. Rodriguez-Quintero, "Renormalisation of quark propagators from twisted-mass lattice QCD at $N_f=2$ ", Phys. Rev. D **83**, 074506 (2011) [arXiv:1011.2414 [hep-ph]].
- B. Blossier, "Jouer aux dés pour percer les secrets ultimes de la matière", Plein-Sud spécial Recherche 2010-2011, 96 (2011).
- B. Blossier, "De l'apprentissage du Braille au dessin des graphes de Feynman", Repères IREM **84**, 19 (2011).
- B. Blossier, "Lattice renormalisation of $O(a)$ improved heavy-light operators: an addendum", Phys. Rev. D **84**, 097501 (2011) [arXiv:1106.2132 [hep-lat]].
- 2012 B. Blossier, Ph. Boucaud, M. Brinet, F. De Soto, X. Du, M. Gravina, V. Morénas, O. Pène, K. Petrov, J. Rodriguez-Quintero, "Ghost-gluon coupling, power corrections and $\Lambda_{\overline{\text{MS}}}$ from lattice QCD with a dynamical charm", Phys. Rev. D **85**, 034503 (2012) [arXiv:1110.5829 [hep-lat]].
- B. Blossier, Ph. Boucaud, M. Brinet, F. De Soto, X. Du, V. Morénas, O. Pène, K. Petrov, J. Rodriguez-Quintero, "The Strong running coupling at τ and Z_0 mass scales from lattice QCD", Phys. Rev. Lett. **108**, 262002 (2012) [arXiv:1201.5770 [hep-ph]].
- B. Blossier *et al.* [ALPHA Collaboration], "Parameters of Heavy Quark Effective Theory from $N_f=2$ lattice QCD", JHEP **1209**, 132 (2012) [arXiv:1203.6516 [hep-lat]].
- 2013 B. Blossier, Ph. Boucaud, M. Brinet, F. De Soto, V. Morénas, O. Pène, K. Petrov and J. Rodriguez-Quintero, "Testing the OPE Wilson coefficient for A^2 from lattice QCD with a dynamical charm", Phys. Rev. D **87**, 074033 (2013) [arXiv:1301.7593 [hep-ph]].
- D. Becirevic, B. Blossier, A. Gerardin, A. Le Yaouanc and F. Sanfilippo, "On the significance of B -decays to radially excited D ", Nucl. Phys. B **872**, 313 (2013) [arXiv:1301.7336 [hep-ph]].
- B. Blossier, J. Bulava, M. Donnellan and A. Gerardin, " $B^{*'} \rightarrow B$ transition", Phys. Rev. D **87**, no. 9, 094518 (2013) [arXiv:1304.3363 [hep-lat]].
- N. Audoin et al, "Adapter sa pédagogie au collège et au lycée des lves en situation de handicap moteur ou ayant des troubles des apprentissages", <http://eduscol.education.fr/ash-ressources-disciplinaires> (2013).

- 2014 F. Bernardoni, B. Blossier, J. Bulava, M. Della Morte, P. Fritzsche, N. Garron, A. Gérardin, J. Heitger *et al.*, "The b -quark mass from non-perturbative $N_f = 2$ Heavy Quark Effective Theory at $O(1/m_h)$ ", Phys. Lett. B **730**, 171 (2014). [arXiv:1311.5498 [hep-lat]].
- B. Blossier *et al.* [ETM Collaboration], "High statistics determination of the strong coupling constant in Taylor scheme and its OPE Wilson coefficient from lattice QCD with a dynamical charm", Phys. Rev. D **89**, 014507 (2014). [arXiv:1310.3763 [hep-ph]].
- B. Blossier, Ph. Boucaud, M. Brinet, F. De Soto, V. Morénas, O. Pène, K. Petrov and J. Rodriguez-Quintero, "A novel method for the physical scale setting on the lattice and its application to $N_f=4$ simulations", Phys. Rev. D **89**, 034026 (2014). [arXiv:1312.1514 [hep-lat]].
- F. Bernardoni *et al.* [ALPHA Collaboration], "Decay constants of B -mesons from non-perturbative HQET with two light dynamical quarks", Phys. Lett. B **735**, 349 (2014). [arXiv:1404.3590 [hep-lat]],
- 2015 B. Blossier, N. Garron and A. Gérardin, "Pion couplings to the scalar B meson", Eur. Phys. J. C **75**, no. 3, 103 (2015). [arXiv:1410.3409 [hep-lat]].
- B. Blossier, M. Brinet, P. Guichon, V. Morénas, O. Pène, J. Rodriguez-Quintero and S. Zappeiopoulos, "Renormalization of quark propagator, vertex functions and twist-2 operators from twisted-mass lattice QCD at $N_f=4$ ", Phys. Rev. D **91**, no. 11, 114507 (2015) [arXiv:1411.1109 [hep-lat]],
- F. Bernardoni *et al.*, "B-meson spectroscopy in HQET at order $1/m$ ", Phys. Rev. D **92**, no. 5, 054509 (2015) [arXiv:1505.03360 [hep-lat]].
- B. Blossier *et al.*, "Adversité de la vie, science partagée", Bulletin de l'Union des Physiciens **976**.
- 2016 N. Lewi-Dumont *et al.*, "Enseigner à des élèves aveugles ou malvoyants", Ed. Canopé.