

Curriculum Vitae

Dr. Emidio Gabrielli

Personal data

- **First name:** Emidio
- **Last name:** Gabrielli
- **Nationality:** Italian

Current position

- **permanent position:** Ricercatore (Assistant Professor)
- **place:** Physics Department, Theoretical Section, University of Trieste, Italy
- **starting date:** Nov 2012

Education

- **1991** - Ph.D. (theoretical physics), University of Rome “La Sapienza”
Supervisor: Prof. Giancarlo Rossi
- **1986** - Laurea/Degree (theoretical physics), University of Rome “La Sapienza”,
Supervisor: Prof. Guido Altarelli

Academic Qualifications

- **2014–2018** - Associate Professor (section 02/A2), Theoretical Physics, Italy
- **2008–2014** and **2014–2018** - Full Professor (section 29), Elementary Particle Physics, France
- **2007** - Lecturer in Theoretical Physics, Finland

Previous positions

- **2011–2014** - Senior Research Scientist: National Institute of Chemical, Physics and Biophysics (NICPB), Tallinn, Estonia
(2012-2014 On leave of absence from University of Trieste)
- **2008–2011** - Visiting Researcher: CERN, Switzerland
- **2007** - Visiting Researcher/Professor: CERN (2 months), University of Uppsala, Sweden (2 months); University of Louvain La Neuve, Belgium (3 months)
- **2000–2006** - Senior Research Scientist: Helsinki Institute of Physics (HIP), Finland
- **2001–2002** - Corresponding Scientific Associate: CERN (6 months), on leave of absence from HIP
- **1997–2000** - Postdoc: University Autonoma of Madrid, Spain
- **1996–1997** - Postdoc: University of Notre Dame, USA
- **1996** - Visiting Researcher: University of Southampton, UK (4 months); SISSA, Trieste, Italy (2 months)
- **1993–1995** - Postdoc: University of Rome La Sapienza, Italy
- **1992–1993** - Fellows of A.Della Riccia Foundation (6 months) and INFN (1 year): CERN, Switzerland

Honours and awards

- **2011 - 2015** Top Researcher Grant, Mobilitas Programme, Estonian Science Foundation
- **2014** - Outstanding contribution in Reviewing, Nuclear Physics B
- **1992** - 6 month Grant of “Angelo della Riccia Foundation”

Referee Activity

- **2003** - External assessor for Associate Professor selection, Galway University (IR)
- **since 2000** - Referee of Physical Review D, Physical Review Letters, Physics Letters B, Nuclear Physics B, Journal of High Energy Physics, Journal of Physics G.

Teaching activity

- **1999** - Graduate course in Theoretical Physics (30 hours)
Title: *Phenomenology of the weak and strong interactions* (in English)
Place: University Autonoma of Madrid
- **2002** - Graduate course in Theoretical Physics (30 hours)
Title: *Phenomenology of Electro-Weak and Strong Interactions, Standard Model and beyond* (in English)
Place: University of Helsinki
- **2003** - Graduate course in Theoretical Physics (30 hours)
Title: *Phenomenology of Electro-Weak and Strong Interactions, Standard Model and beyond* (in English)
Place: University of Helsinki
- **2005** - Graduate course in Theoretical Physics (10 hours)
Title: *Forward Physics at the LHC and Top Quark Physics* (in English)
Place: University of Helsinki
- **2006** - Graduate course in Theoretical Physics (28 hours)
Title: *Flavor changing neutral current processes and CP violating phenomena* (in English)
Place: University of Helsinki
- **2007** - Graduate course in Theoretical Physics (12 hours)
Title: *Flavor changing neutral current processes and CP violating phenomena* (in English)
Place: University of Louvain-la-Neuve
- **2014-2015-2016** - Undergraduate course in Theoretical Physics (48 hours)
“Corso di Laurea Magistrale”
Title: *Dynamics of elementary particles* (in Italian/English(from 2016))
Place: University of Trieste

Academic duties

- **2014-2015** - Supervisor of one Master Thesis (Magistrale) and one Bachelor Thesis (Triennale) at the University of Trieste.
- **2012-2015** - Supervisor of one PhD thesis at NICPB, Tallinn
- **2005-2006** - Postgraduate supervisor at Helsinki University
- **2005** - Internal examiner of PhD thesis at University of Helsinki
- **2001** - Opponent of a PhD thesis at the University of Helsinki

International Scientific Activities

- **Invited talks at International Conferences and Workshops (from 2000)**
 - **VI IFT-UAM Christmas Workshop on Particle Physics** 18-21 December (2000), Madrid, Spain. Title: *The $b \rightarrow s\gamma$ decay in SUSY models with non-universal A-terms.*
 - **Third Nordic LHC Physics Workshop** 16-17 March (2001), Oslo, Norway. Title: *Recent results on $g-2$ of the muon.*
 - **Fifth Nordic LHC Physics Workshop and Norfa Training Course**, 23-24 May (2002), Helsinki, Finland.
 - **6th Nordic LHC Physics Workshop**, 11-13 November (2002), Uppsala, Sweden. Title: *Quantum Gravity and Large Extra Dimensions in Collider Physics.*
 - **ECFA DESY, Linear Collider Workshop**, 1-4 April (2003), Amsterdam, Netherland. Title: *Large Extra Dimension effects in Higgs production via Vector Boson fusion.*
 - **Planck 03, From the Planck Scale to the Electroweak Scale**, 26-31 May (2003), CSIS, Madrid, Spain. Title: *Large Extra Dimension effects in Higgs production via Vector Boson fusion.*
 - **X Nordic LHC Physics Workshop**, 12-13 November 2004, Center for Physics Astronomy and Biotechnology, Stockholm, Sweden. Title: *SUSY contributions to CP violating processes in B decays.*
 - **MCWS workshop**, INFN, National Laboratory of Frascati, Italy, 22-25 October 2006. Title: *Searches for a light Higgs boson in association with a photon and two forward jets.*
 - **ILC workshop**, INFN, National Laboratory of Frascati, Italy, 25th October 2006. Title: *Review on Extra-Dimensions.*

- **XIII LHC Nordic meeting**, Department of Physics, University of Helsinki, Finland, 25-27th October 2006. Title: *Searches for a light Higgs boson in association with a photon and two forward jets*
- **XIV Nordic LHC Workshop**, AlbaNova University Center, Stockholm, Sweden, 14-16 May 2007. Title: *Higgs boson production in association with a photon in VBF.*
- **BSM Higgs Micro workshop**, CP3, Catholic University of Louvain, Louvain-la-Neuve, Belgium, 26-30 November 2008. Title: *Higgs boson productions in association with a photon at the LHC.*
- **ATLAS Higgs Working Group**, CERN, 7th November 2008. Title: *Higgs boson production in association with a photon.*
- **Implications of LHC results for TeV-scale physics**, CERN, 26-30 March 2011. Title: *Looking for a Fermiophobic Higgs at LHC.*
- **LCWS11 International Workshop on future Linear Colliders**, Granada 26-30 September 2011. Title: *Fermiophobic Higgs boson decays: probing the radiative fermionic sector at a linear collider.*
- **Implications of LHC results for TeV-scale physics**, CERN, 13-17 July 2012, Title: *Looking for a Fermiophobic Higgs at LHC: an update.*
- **9th b-physics Workshop**, 18-19 February 2013, LAPP Annecy, French-Italian meeting on the b-physics. Title: *Implications of the present measurements on theoretical ideas.*
- **37th International Conference on High Energy Physics**, Valencia, Spain, 2-9 July 2014. Title: *Enhancing the $t\bar{t}$ signal through top-spin polarization effects at the LHC*

- **Invited talks at Universities and Research Institutes (from 2001)**

- **2001** - Universities of Bologna, Autonoma of Madrid (UAM)
- **2002** - University of Roma-1
- **2003** - Universities of Bologna, Roma-3, Padova
- **2004** - Universities of Bergen, UAM
- **2005** - Universities of Parma, Roma-1
- **2007** - CERN and Universities of Geneva, Grenoble, Louvain-La-Neuve, Uppsala
- **2008** - University of Padova, Laboratoire d' Annecy-Le-Vieux de Physique Theorique
- **2009** - Laboratory of CERN, University of Helsinki
- **2010** - Centre de Physique Theorique, Marseille
- **2011** - University of Trieste

- **2012** - Universities of Barcellona, Helsinki and Max-Planck Institute Munich
- **2013** - University of Trieste
- **2014** - CMS Collaboration at CERN

- **List of Research Collaborations**

- **Belgium** - University of Louvain-La-Neuve, **Egypt** - British University in Cairo, **Estonia** - NICPB, Tallinn, University of Tartu, **Finland** - Helsinki Institute of Physics, University of Helsinki, **France** - LPT Orsay, LAPPTH Annecy, **Germany** - University of Hamburg, **Italy** - Universities of: Ferrara, Lecce, Parma, Pavia, Pisa, Roma-1, Roma-3, **Russia** - Moscow State University, **Spain** - Universities of: Durham, Southampton, **Spain** - Universities of: Granada, Autonoma of Madrid, **Sweden** - University of Uppsala, **Switzerland** - Laboratory of CERN, Geneva, **United States** - University of Notre Dame, Indiana

Research activity

My research activity is in the framework of elementary particle theory and quantum field theories. The fields where I gave significant contributions are the following

- Phenomenology of the Standard Model (SM) and beyond
- Phenomenology of supersymmetric (SUSY) extensions of the SM
- CP violating phenomena in the SM and its supersymmetric extensions
- SUSY Dark Matter search
- Higgs and gauge boson physics at colliders
- Quantum gravity models in large extra-dimensions
- Lattice field theories

Scientific impact

- Number of publications on peer-reviewed journals: **64**
- Number of publications on proceedings of conferences/books: **20**
- Total number of citations: **3095**
- Average citation per paper (only on peer review journals): **44.5**
- Hirsh factor “h” (over all articles): **27**
- Top cited articles¹:
 - title: **A complete analysis of FCNC and CP constraints in general susy extensions of the standard model**
co-authors: F. Gabbiani, A. Masiero, L. Silvestrini
journal: Nucl. Phys. **B477** (1996) 321
N. citations: **1186**
 - title: **Flavour changing neutral currents and CP violating processes in generalized supersymmetric theories**
co-authors: A. Masiero, L. Silvestrini
journal: Phys. Lett. **B374** (1996) 80
N. citations: **109**

¹Number of citations is updated to 09/03/2016.

- title: **Supersymmetric corrections to ϵ and ϵ'/ϵ at the leading order in QCD and QED**
co-author: G.F. Giudice
journal: Nucl. Phys. **B433** (1995) 3
N. citations: **111**
- title: **Renormalization of lattice two fermion operators with improved nearest neighbour action**
co-authors: G. Heatlie, G. Martinelli, C. Pittori, C.T. Sachrajda
journal: Nucl. Phys. **B362** (1991),475
N. citations: **78**
- title: **The production of weak intermediate bosons in e-p reactions**
journal: Modern Physics Letters **A**, Vol.1,No.8 (1986) 465
N. citations: **64**
- title: **The chromomagnetic dipole operator and the B semileptonic branching ratio**
co-authors: M. Ciuchini, G.F. Giudice
journal: Phys. Lett. **B388** (1996) 353
N. citations: **64**
- title: **Low energy signals for a minimal gauge-mediated model.**
co-author: U. Sarid
journal: Phys. Rev. Lett. **79** (1997) 4752
N. citations: **57**
- title: **Phenomenological viability of neutralino dark matter in the NMSSM**
co-authors: D. G. Cerdeno, D. E. Lopez-Fogliani, C. Munoz, A. M. Teixeira
JCAP **0706**, 008 (2007)
N. citations: **64**
- title: **Towards Completing the Standard Model: Vacuum Stability, EWSB and Dark Matter**
co-authors: M. Heikinheimo, K. Kannike, A. Racioppi, M. Raidal, C. Spethmann
Phys. Rev. **D89**, 015017 (2014)
N. citations: **73**
- title: **A SUSY Inspired Simplified Model for the 750 GeV Diphoton Excess**
co-authors: K. Kannike, B. Mele, M. Raidal, C. Spethmann, H. Veermäe
journal: to appear on Phys. Lett. B; arXiv:1512.05961. N. citations: **97**

Complete list of publications

Peer-reviewed scientific articles

- [1] title: **The production of weak intermediate bosons in e-p reactions**
journal: Modern Physics Letters **A**, Vol.1,No.8 (1986) 465
- [2] title: **Quark-antiquark pair production via γW fusion at high energy e^+e^- colliders**
co-authors: M. Ciuchini, E. Franco
journal: Z. Phys. **C 47** (1990) 577
- [3] title: **Renormalization of lattice two fermion operators with improved nearest neighbour action**
co-authors: G. Heatlie, G. Martinelli, C. Pittori, C.T. Sachrajda
journal: Nucl. Phys. **B362** (1991),475
- [4] title: **Extended pure Yang Mills gauge theories with scalar and tensor gauge fields**
journal: Phys. Lett. **B258** (1991) 151
- [5] title: **Four-Fermion Operators with improved nearest-neighbour action**
co-authors: R. Frezzotti, C. Pittori, G.C. Rossi
journal: Nucl. Phys. **B373** (1992) 781
- [6] title: **New improved operators: a convenient redefinition**
co-authors: A. Borrelli, R. Frezzotti, C. Pittori
journal: Nucl. Phys. **B409** (1993) 392
- [7] title: **The decays $K^+ \rightarrow e^+\nu_e\gamma$ and $K^+ \rightarrow \mu^+\nu_\mu\gamma$, and tensorial coupling in the effective weak hamiltonian**
journal: Phys. Lett. **B301** (1993) 409
- [8] title: **Instanton effects in the light-quark masses determination from QCD sum rules**
co-author: P. Nason
journal: Phys. Lett. **B313** (1993) 430
- [9] title: **Higgs production in association with a vector boson pair at future e^+e^- colliders**
co-authors: M. Baillargeon, F. Boudjema, F. Coupyers, B. Mele
journal: Nucl. Phys. **B424** (1994) 343
- [10] title: **The relevance of the dipole penguin operators in ϵ'/ϵ**
co-authors: S. Bertolini, M. Fabbrichesi
journal: Phys. Lett. **B327** (1994) 136

- [11] title: **Supersymmetric corrections to ϵ and ϵ'/ϵ at the leading order in QCD and QED**
co-author: G.F. Giudice
journal: Nucl. Phys. **B433** (1995) 3
- [12] title: **Flavour changing neutral currents and CP violating processes in generalized supersymmetric theories**
co-authors: A. Masiero, L. Silvestrini
journal: Phys. Lett.**B374** (1996) 80
- [13] title: **A complete analysis of FCNC and CP constraints in general susy extensions of the standard model**
co-authors: F. Gabbiani, A. Masiero, L. Silvestrini
journal: Nucl. Phys. **B477** (1996) 321
- [14] title: **The chromomagnetic dipole operator and the B semileptonic branching ratio**
co-authors: M. Ciuchini, G.F. Giudice
journal: Phys. Lett. **B388** (1996) 353
- [15] title: **$Z\gamma H$ vertex effects in Higgs production at future $e\gamma$ linear colliders.**
co-authors: V.A. Ilyin, B. Mele
journal: Phys. Rev. **D56** (1997) 5945
- [16] title: **Low-energy signals for a minimal gauge mediated model.**
co-author: U. Sarid
journal: Phys. Rev. Lett. **79** (1997) 4752
- [17] title: **Imminent phenomenology of a minimal gauge-mediated model.**
co-author: U. Sarid
journal: Phys. Rev **D58** (1998) 115003
- [18] title: **Looking for anomalous $\gamma\gamma H$ and $Z\gamma H$ couplings effects at future linear colliders.**
co-authors: V.A. Ilyin, B. Mele
journal: Phys. Rev **D60** (1999) 113005
- [19] title: **Quenched Supersymmetry**
co-authors: A. Donini, B. Gavela
journal: Nucl. Phys. **B546** (1999) 119
- [20] title: **N=1 Supersymmetric Yang-Mills on the lattice at strong coupling**
co-authors: A. Gonzalez-Arroyo, C. Pena
journal: Int. J. Mod. Phys. **A15** (2000) 553

- [21] title: **Extended Yang-Mills Theories in Euclidean space with higher spin fields.**
journal: Annals Phys. **287** (2001) 229
- [22] title: **Model independent constraints on leptoquarks from rare muon and tau lepton processes**
journal: Phys. Rev. **D62** (2000) 055009
- [23] title: **The $b \rightarrow s\gamma$ decay in SUSY models with nonuniversal A terms**
co-authors: S. Khalil, E. Torrente-Lujan
journal: Nucl. Phys. **B594** (2001) 3
- [24] title: **Initial scales, supersymmetric Dark Matter and variations of neutralino nucleon cross sections**
co-authors: S. Khalil, C. Munoz, E. Torrente-Lujan
journal: Phys. Rev. **D63** (2001) 025008
- [25] title: **Determination of the string scale in D-brane scenarios and Dark Matter implications**
co-authors: D.G. Cerdeno, S. Khalil, C. Munoz, E. Torrente-Lujan
journal: Nucl. Phys. **B603** (2001) 231
- [26] title: **Muon anomalous magnetic moment in supersymmetric models with intermediate scale**
co-authors: D.G. Cerdeno, S. Khalil, C. Muñoz, E. Torrente-Lujan
journal: Phys. Rev. **D64** (2001) 093012
- [27] title: **g-2 of the muon in SUSY models with Gauge multiplets in the Bulk of Extra-dimensions**
co-authors: K. Enqvist, K. Huitu
journal: Phys. Lett. **B512** (2001) 107
- [28] title: **Vacuum stability bounds in anomaly and gaugino mediated SUSY breaking models**
co-authors: K. Huitu, S. Roy
journal: Phys. Rev. **D65** (2002) 075005
- [29] title: **On the $B \rightarrow X_s \rightarrow l^+l^-$ decays in general supersymmetric models**
co-author: S. Khalil
journal: Phys. Lett. **B530** (2002) 133
- [30] title: **Gravitational decays of heavy particles in large extra dimensions**
co-author: B. Mele
journal: Nucl. Phys. **B647** (2002) 319

- [31] title: **Constraining supersymmetric models from $B_d - \bar{B}_d$ mixing and the $B \rightarrow J/\Psi K_S$ asymmetry**
co-author: S. Khalil
journal: Phys. Rev. **D67** (2003) 015008
- [32] title: **Virtual graviton exchanges at the Z pole in large extra dimensions**
co-authors: A. Datta, B. Mele
journal: Phys. Lett. **B552** (2003) 237
- [33] title: **Large extra dimension effects in Higgs boson production at linear colliders and Higgs factories**
co-authors: A. Datta, B. Mele
journal: JHEP **0310:003** (2003)
- [34] title: **Neutralino Nucleon cross section and charge and color breaking constraints**
co-authors: D.G. Cerdeño, M.E. Gomez, C. Muñoz, E. Torrente-Lujan
journal: JHEP **0306:030** (2003)
- [35] title: **Chargino contribution to the CP asymmetry in $B \rightarrow \Phi K_S$ decay**
co-authors: D. Chakraverty, K. Huitu, S. Khalil
journal: Phys. Rev. **D68** (2003) 095004
- [36] title: **Violation of angular momentum selection rules in quantum gravity**
co-authors: A. Datta, B. Mele
journal: Phys. Lett. **B579** (2004) 189
- [37] title: **Comparative study of CP asymmetries in supersymmetric models**
co-authors: K. Huitu, S. Khalil
journal: Nucl. Phys. **B710** (2005) 139
- [38] title: **Light mesons and muon radiative decays and photon polarization asymmetry**
co-author: Luca Trentadue
journal: Nucl. Phys. **B792** (2008) 48
- [39] title: **Photon propagation in magnetic and electric fields with scalar/pseudoscalar couplings: a new look**
co-authors: K. Huitu, S. Roy
journal: Phys. Rev. **D74** (2006) 073002
- [40] title: **Phenomenological viability of neutralino dark matter in the Next-to-Minimal Supersymmetric Standard Model**
co-authors: D.G. Cerdeño, D.E. López-Fogliani, C. Muñoz, A.M. Teixeira
journal: JCAP06 (2007) 008

- [41] title: **Higgs boson production in association with a photon in vector boson fusion at LHC**
co-authors: F. Maltoni, B. Mele, M. Moretti, F. Piccinini, R. Pittau,
journal: Nucl. Phys. **B781** (2007) 64
- [42] title: **Higgs boson plus photon production at the LHC: a clean probe of the b-quark parton densities**
co-authors: B. Mele, J. Rathsman
journal: Phys. Rev. **D77** (2008) 015007
- [43] title: **On the dynamical breaking of chiral symmetry: A New mechanism**
journal: Phys. Rev. **D77** (2008) 055020
- [44] title: **Flavor Changing Fermion-Graviton Vertices**
co-authors: G. Degrassi, L. Trentadue
journal: Phys. Rev. **D79** (2009) 053004
- [45] title: **Testing Effective Yukawa Couplings in Higgs Searches at the Tevatron and LHC**
co-author: B. Mele
journal: Phys. Rev. **D82** (2010) 113014
- [46] title: **Effective Yukawa couplings and flavor-changing Higgs boson decays at linear colliders**
co-author: B. Mele
journal: Phys. Rev. **D83** (2011) 073009
- [47] title: **Effective axial-vector coupling of gluon as an explanation to the top quark asymmetry**
co-author: M. Raidal
journal: Phys. Rev. **D84** (2011) 054017
- [48] title: **Implications of the effective axial-vector coupling of gluon on top-quark charge asymmetry at the LHC**
co-authors: A. Racioppi, M. Raidal
journal: Phys. Rev. **D85** (2012) 074021
- [49] title: **Has a fermiophobic Higgs boson been detected at the LHC ?**
co-authors: B. Mele, M. Raidal
journal: Phys. Lett. **B716** (2012) 322
- [50] title: **Fermiophobic Higgs boson and supersymmetry**
co-authors: K. Kannike, B. Mele, A. Racioppi, M. Raidal
journal: Phys. Rev. **D86** (2012) 055014

- [51] title: **Single top and Higgs associated production as a probe of the $Ht\bar{t}$ coupling sign at the LHC**
co-authors: S. Biswas, B. Mele
journal: JHEP **1301** (2013) 088
- [52] title: **Implications of effective axial-vector coupling of gluon for $t\bar{t}$ spin polarizations at the LHC**
co-authors: A. Racioppi, M. Raidal, H. Veermae
journal: Phys. Rev. **D87** (2013) 054001
- [53] title: **One loop Standard Model corrections to flavor diagonal fermion-graviton vertices**
co-authors: C. Coriano, L. Delle Rose, L. Trentadue
journal: Phys. Rev. **D87** (2013) 054020
- [54] title: **Mass Corrections to Flavor-Changing Fermion-Graviton Vertices in the Standard Model**
co-authors: C. Coriano, L. Delle Rose, L. Trentadue
journal: Phys. Rev. **D88** (2013) 085008
- [55] title: **Direct constraints on the top-Higgs coupling from the 8 TeV LHC data**
co-authors: S. Biswas, F. Margaroli, B. Mele
journal: JHEP **07** (2013) 073
- [56] title: **Towards completing the Standard Model: Vacuum Stability, EWSB and Dark Matter**
co-authors: M. Heikinheimo, K. Kannike, A. Racioppi, M. Raidal, C. Spethmann
journal: Phys Rev **D89** (2014) 015017
- [57] title: **Exponentially spread dynamical Yukawa couplings from non-perturbative chiral symmetry breaking in the dark sector**
co-author: M. Raidal
journal: Phys Rev **D89** (2014) 015008
- [58] title: **Anomalous Higgs-boson coupling effects in HWW production at the LHC**
co-authors: M. Heikinheimo, L. Marzola, B. Mele, C. Spethmann, H. Veermae
journal: Phys Rev **D89** (2014) 053012
- [59] title: **Fermion scattering in a gravitational background: Electroweak corrections and Flavour transitions**
co-authors: C. Coriano, L. Delle Rose, L. Trentadue
journal: JHEP **1403** (2014) 136

- [60] title: **Enhancing the $t\bar{t}H$ signal through top-quark spin polarization effects at the LHC**
co-authors: S. Biswas, R. Frederix, B. Mele
journal: JHEP **1407** (2014) 020
- [61] title: **Dark photons and resonant monophoton signatures in Higgs boson decays at the LHC**
co-authors: M. Heikinheimo, B. Mele, M. Raidal
journal: Phys. Rev. D **90** (2014) 055032
- [62] title: **Higgs-boson production in association with a dark photon in e^+e^- collisions**
co-authors: S. Biswas, M. Heikinheimo, B. Mele
journal: JHEP **1506** (2015) 102
- [63] title: **Dark matter and spin-1 milli-charged particles**
co-authors: L. Marzola, M. Raidal, H. Veermäe
journal: JHEP **1508** (2015) 150
- [64] title: **A SUSY Inspired Simplified Model for the 750 GeV Diphoton Excess**
co-authors: K. Kannike, B. Mele, M. Raidal, C. Spethmann, H. Veermäe
journal: to appear on Phys. Lett. B; arXiv:1512.05961.
- [65] title: **Asking for an extra photon in Higgs production at the LHC and beyond**
co-authors: B. Mele, F. Piccinini, R. Pittau
journal: arXiv:1601.03635
- [66] title: **Dark-Photon searches via Higgs-boson production at the LHC**
co-authors: S. Biswas, M. Heikinheimo, B. Mele
journal: arXiv:1603.01377

Contribution to book and other compilations

- [1] title: **Standard Model Processes**
co-authors: F. Boudjema, B. Mele *et al.*):
Book: Physics at LEP2, Vol. 1, 207, **CERN Report 1996**; arXiv: hep-ph/9601224
- [2] title: **Measuring $Z\gamma H$ vertex effects at $e\gamma$ linear colliders.**
co-authors: V.A. Ilyin, B. Mele:
Book: DESY Report DESY-97-123E
E-print: arXiv: hep-ph/9707370

- [3] title: **Anomalous $\gamma\gamma H$ and $Z\gamma H$ couplings in the process $e\gamma \rightarrow eH$**
co-authors: V.A. Ilyin, B. Mele:
Book: DESY report on '*Physics Studies for a Future Linear Collider*', **DESY 123F**.
E-print: arXiv: hep-ph/9912321
- [4] Title: **Higgs Working Group: Summary Report**
co-authors: S. Dawson *et al*
e-Print: arXiv:0803.1154 [hep-ph]
- [5] title: **Les Houches 2011: Physics at TeV Colliders New Physics Working Group Report**, co-authors: G. Brooijmans, *et al.*
E-print: arXiv:1203.1488 [hep-ph].

Articles in conference proceedings

- [1] title: **Single weak gauge boson production at CLIC**
Proceedings: Workshop on Physics at Future Accelerators, *La Thuile and Geneva*, 7-13 Jan 1987
Report: CERN-87-07 Vol. II
- [2] title: **'Improved' computation in lattice QCD**
co-authors: G. Heatlie, G. Martinelli, C. Pittori, G.C. Rossi, C.T. Sachrajda, A. Vladikas
Proceedings: **Lattice 90**, Tallahassee 1990
Journal: Nucl. Phys. *Proc. Suppl.* **20** (1991), 448
- [3] title: **The charged K decays and tensorial coupling in the effective weak hamiltonian**
Proceedings: Eurodaphne collaboration meeting, Frascati (1993) april 19-23
Report: **LNF-93/053**
- [4] title: **Production of a Higgs with Two Gauge Bosons**
co-authors: F. Boudjema, M. Baillargeon, F. Cuyper, B. Mele
Proceedings: *2nd Workshop on e^+e^- Collisions at 500 GeV. The Physics Potential*, Munich, Annecy, Hamburg, 20 Nov 1992 to 3 Apr, 1993
Report: **DESY report 1994**, ed. by P.M.Zerwas
- [5] title: **Constraints on supersymmetry from FCNC and CP violation**
co-authors: A. Masiero, L. Silvestrini
Proceedings: Workshop SUSY 95, Ecole Polytechnique, Palaiseau, May 1995
Journal: Palaiseau 1995, SUSY 95, 83-95
E-print: hep-ph/9510215
- [6] title: **$Z\gamma H$ vertex at future colliders**
co-authors: V.A. Ilyin, B. Mele
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