Lorenzo Magnea

Curriculum Vitae

Current Position

- Professor of Theoretical Physics, University of Torino
- Head of the Theory Group, Department of Physics, University of Torino.

1. Biography and Education

- Born in Torino, Italy, March 1961.
- "Laurea" in Physics, University of Torino, July 1985.
  - Thesis advisor: Prof. Tullio Regge.
  - Thesis: "Field theories on simplicial lattices".
  - Final grade: 110/110 with Honours.
- Drafted for non-military service, March 1985 – February 1986.
  - Coordinating non-profit social-work activities at Caritas, Torino Dioceses.
- Married to Lena Ulrika Blom, February 1990.
  - Children: Daniele (b. 1990), Erica (b. 1992).
- Ph.D. in Physics, State University of New York at Stony Brook (USA), August 1990.
  - Thesis advisor: Prof. George Sterman.
  - Thesis: "On the infrared-collinear structure of gauge theories".

- Training Scholarships:
  - Graduate Scholarship of the Istituto Nazionale di Fisica Nucleare (INFN), for post-graduate training in Italy, 1985, (declined, to enroll in the Ph.D. program at Stony Brook).
  - Angelo Della Riccia Fellowship in 1987, 1988 and 1989.

- Languages:
  - Italian (mother tongue).
  - English (fluent).
  - French (very good).
  - Swedish (good).

2. Research Positions

- Graduate Assistant, C. N. Yang Institute for Theoretical Physics, State University of New York at Stony Brook (USA),
  September 1986 – August 1990.

- Post–Doctoral Associate, F.R. Newman Laboratory of Nuclear Studies, Cornell University, USA.
  September 1990 – August 1992.

- Assistant Professor, Department of Theoretical Physics, University of Torino, Italy.
  October 1990 – September 2002.

- Visiting Scientist, NORDITA, Copenhagen, Denmark.
  September 1995 – August 1997.

- Associate Professor, Department of Theoretical Physics, University of Torino, Italy.
  October 2002 – April 2015.

- Paid short-term Visitor, CERN, Switzerland.
  May – July 2001; May – June 2004; August 2005; August 2006; August 2007; August 2009.

- Paid Scientific Associate, CERN, Switzerland.
  August – December 2004; January – June 2010.

- Distinguished Visitor, Scottish University Physics Alliance (SUPA)
  February 2011.
- Associate Member, Higgs Center for Theoretical Physics, University of Edinburgh, UK.
  September 2012 - present.
- Senior Visiting Scientist for the European Union ITN Network LHCPhenoNet, NIKHEF, Amsterdam, NL.
  May-June 2013 - November 2014.
- Full Professor, Department of Physics, University of Torino, Italy.
  May 2015 – present.

3. Teaching Experience

- Teaching Assistant, State University of New York at Stony Brook, 1986 – 1990.
  - Introductory Physics.
  - Introductory Classical Mechanics (Honors Class).
  - Elementary Particle Physics.
- Lecturer, University of Torino, 1992 – 1995 and 1997 – present.
  - Introduction to Modern Physics.
  - Quantum Mechanics (for the Physics degree).
  - Quantum Mechanics (for the Mathematics degree).
  - Introductory Quantum Mechanics for the Advanced School for High-School Teachers (SSIS).
  - Introduction to Group Theory.
  - Phenomenology of Fundamental Interactions.
  - Introductory Electromagnetism (for the Materials Sciences degree).
  - Introductory Electromagnetism (for the Chemistry degree).
  - Introductory Physics (for Medical Sciences).
  - Introductory Physics (for Veterinary Sciences).
  - Advanced Quantum Field Theory.
  - Computing Techniques for Physics.
  - Physics for Citizens (for the School of Human Sciences).
    This course, which I proposed and developed, is open to the general public and was featured in local and national news broadcasts, including the RAI popular science program Geo&Geo in March 2016.

- Ph.D. and Post-Graduate Lecture Series.
  - "Advanced methods for the calculation of QCD scattering amplitudes", University of Torino, 1993.
  - "From the Parton Model to Perturbative QCD", University of Torino, 2000, 2006, 2007, 2011.
  - "Introduction to Perturbative QCD", National Doctoral School in Theoretical Physics, University of Parma, September 2002.
  - "Introducing Perturbative QCD for hadron collider applications", ICTP Trieste (Italy), December 2008.
  - "All-order results in Perturbative QCD", Institute for Mathematical Sciences (IMSc), Chennai (IN), January 2008, and Queen Mary University of London (UK), February 2008.
  - "Long-Distance Singularities in massless gauge theories", advanced lectures at ETH (Zurich, CH), January 2010; SUPA Lectures at the Universities of Edinburgh ad Glasgow, February 2011; lectures for the Doctoral School in Physics and Astrophysics at the University of Torino, March 2012 and January 2015; lectures at the NIKHEF Theory Group, Amsterdam, May 2013; lectures at WHEPP XIV, at IIT Kanpur (IN), December 2015.

- Student Supervision
  - Frequent supervision of final projects for the Bachelor's Degree in Physics.
  - Frequent supervision of Master's Thesis for the Master's Degrees in Physics and Physics of Fundamental Interactions.
  - Ph.D. Thesis advisor for Dr. Alberto Frizzo (2001), Dr. Michele Allegra (2014) and Dr. Giulio Falcioni (2015).
  - External Examiner in Ph.D. Thesis Committees at the Universities of Parma, Milano, Utrecht, Manchester, Edinburgh and Amsterdam.

4. Management and Administrative Activities

- Head Tutor for the Master's Degree in Physics of Fundamental Interactions (2002 – 2003).

- Member of the Faculty Council for the Doctorate Program in Physics (2003 – 2006).

- Member of the Faculty Council for the Graduate School in Sciences and Advanced Technologies (2006 – 2015).

- Coordinator of the Orientation and Outreach Committee for the Degree Programs in Physics (2002 – 2005). The committee is in charge of activities designed to introduce the degree programs in Physics and Physics careers to high-school students, and promotes general outreach activities.

  - Coordinator of the outreach program "La Scienza dal Vivo" ("Live Science") for the Physics laboratories (2002 – 2005). Working with regional authorities, the program brought high-school students to University laboratories for guided visits, involving 700 – 900 students per year.
  - Member of the local Joint Organizing Committee for the World Year of Physics (2004 – 2005).
  - Promoter of the Movie Festival "Vedere la Scienza", Torino, Massimo Theater, April 2005.
  - Organizer of the "Luigi Lagrange Prize" and of the "Sergio Fubini Prize": physics competitions for high-school students, promoting the knowledge of Physics and targeting enrollment in Physics degree programs.

- Chairman of the Orientation and Outreach Committee for the Faculty of Natural Sciences of the University of Torino (2005 – 2009).

  - Coordinator of the outreach program "La Scienza dal Vivo" ("Live Science") for all the Natural Sciences degree programs (2005 – 2009). Working with regional authorities, the program involved 2000 – 2500 high-school students per year.
  - Coordinator of the outreach programs "Three Mornings at the University" (high-school students selected on the basis of excellence in science participate in experiments in University laboratories) and "The University goes to School" (academic lectures given by University lecturers in high schools).
  - Promoter of the Summer Orientation Program "OrientaMente" for the Faculty of Sciences and the Degree Program in Biotechnologies (July – September 2008; July 2009).

- Coordinator of the Master's Degree program in Physics at the University of Torino (2015 – present).

- Head of the Theoretical Physics Section of the Department of Physics of the University of Torino (2015 – present).

5. Research Work: Highlights

I present here a brief summary of some of my most significant research results, based on twelve selected publication, in chronological order.

- Regge calculus

  In collaboration with Michele Caselle and Alessandro D'Adda, I constructed a first order version of Regge Calculus, with dynamical variables belonging to the Poincaré group [83]. This particular discretization of General Relativity is appropriate for coupling of gravity with fermionic matter, and reduces to ordinary Regge calculus in the small curvature limit. Related studies of lattice gravity on a hypercubic lattice appeared in [87, 86].

- The quark form factor

  Working with George Sterman, I studied evolution equations for QCD amplitudes and cross section, arising from factorization. We derived an exact all-order perturbative expression for the renormalized quark form factor in terms of two anomalous dimensions, regulating infrared divergences with dimensional regularization [80]. This paper introduces for the first time in perturbative QCD the use of d-dimensional evolution equations and of the d-dimensional running coupling. Using these results, closed form expressions for the logarithm of the form factor were later derived in [56]. This paper has become a standard reference for all-order studies of infrared effects in QCD and related gauge theories.

- Non-relativistic QCD

  In a collaboration led by Peter Lepage, I constructed an effective field theory for QCD in the non-relativistic limit, in the continuum and on the lattice, appropriate for the determination of the spectra and properties of heavy quarkonia [78]. The work included the determination of the relevant operators, the analysis of perturbative corrections, and a resummation of large corrections due to lattice effects. This paper has been successfully applied in a vast literature, both to lattice studies of quarkonium spectroscopy and to perturbative studies of quarkonium production and decay at colliders. It has collected more than 500 citations in the `Inspire` database.

- Field theory limits of string amplitudes

  Multiloop string techniques can be applied to the calculation of field theory scattering amplitudes, renormalization constants and effective actions; working with Paolo di Vecchia and others, I developed these techniques [73] to show how one-loop string theory amplitudes can be

consistently continued off-shell in the field theory limit, how individual Feynman diagram topologies can be isolated, and the gauge chosen by string theory can be identified at the one-loop level. This paper has found widespread applications in string and brane calculations. The techniques introduced here were later developed in [69, 58, 53], including applications to scalar theories at two loops, and they were applied to effective actions in constant background gauge fields in [41]. A complete generalization to gluon amplitudes at two loops and beyond is under way, with first results recently published in [14, 6].

- Power corrections to QCD observables

  Renormalon and related 'dispersive' techniques have been widely applied to the study of leading non-perturbative corrections to QCD cross sections. In [64], Martin Beneke, Vladimir Braun and I provided a general analysis of the phenomenology of power corrections in fragmentation processes in e^+e^- annihilation, using renormalon techniques. This paper is among the first to analyze the effect of non-inclusive corrections to renormalon-based estimates of power corrections in QCD. Further applications of these and related techniques were presented in [59, 46, 43].

- Exponentiation beyond leading-power logarithms

  Soft-gluon resummations compute certain classes of contributions to QCD amplitudes and cross sections to all orders in perturbation theory. They are a widespread and very relevant tool both for the theory and the phenomenology of strong interactions. With Eric Laenen and others, I have been studying the extension of resummation techniques beyond leading power in the soft energy. We first studied a class of non–logarithmic contributions, which can be organized to all orders for all processes which are electroweak at tree level [47]. These contributions are independent of kinematics and can have a sizable impact on collider observables of phenomenological interest. They have subsequently been studied by a number of other authors. More recently, we have developed a factorisation formalism for the same observables which provides a complete organization of next-to-leading-power threshold logarithms [27, 19, 8, 7, 1]. Work to develop a full-fledged resummation formalism at this accuracy is ongoing.

- Resummation at high logarithmic accuracy

  Again in collaboration with Eric Laenen, I studied the universality properties of soft gluon resummation, mapping electroweak annihilation observables to Deep Inelastic Scattering anomalous dimensions; this led to the first explicit calculation of three-loop (N^3LL) soft contributions to the Drell-Yan process and to Higgs boson production in the gluon

fusion channel [38]. Our calculation is an important ingredient of the most precise theoretical predictions to date for these process, now being investigated experimentally at LHC.

- Non-perturbative corrections to jet cross sections

  Working with Mrinal Dasgupta and Gavin Salam, I performed a detailed study of the impact and functional dependence of the leading non-perturbative corrections to jet cross sections at hadron colliders, using both analytic methods related to renormalon techniques and Monte-Carlo simulations; we proposed experimental measurements discriminating hadronization, underlying event and pileup corrections, by means of a study of jet radius dependence [31]. This paper is relevant for all jet studies at Tevatron and at LHC, and is widely used in this context when power-suppressed corrections are relevant.

- Infrared poles of gauge theory amplitudes

  Gauge theory scattering amplitudes have been the focus of a massive research effort in the past several years, which brought forth remarkable progress. With Lance Dixon and George Sterman, I studied the universality properties of infrared and collinear divergences for fixed-angle amplitudes in massless gauge theories, such as QCD and the maximally supersymmetric $\mathcal{N} = 4$ Super-Yang-Mills theory (SYM) [29]. Our paper derives some exact results connecting amplitudes and anomalous dimensions in $\mathcal{N} = 4$ SYM, one of which has already been verified in the strong coupling limit, with string methods. The methods developed here have led to significant progress in our understanding of the infrared structure of multi-particle amplitudes in gauge theories, some of which is described below.

- The dipole formula

  With Einan Gardi, I studied the constraints imposed by factorization on the all-order expression for the soft anomalous dimension matrix governing soft singularities for arbitrary fixed-angle scattering amplitudes in massless gauge theories. The constraints lead to an ansatz expressing this matrix to all orders in terms of a sum over color dipoles, in turn proportional to the cusp anomalous dimension [26]. The 'dipole formula' derived in this paper is the most general existing result for the infrared behavior of gauge amplitudes. The paper furthermore provides a characterization of all possible corrections, which fall in only two well-defined classes, and which are currently under study at three loops and beyond. Further developments are discussed in [23, 17] and below.

- High-energy amplitudes

In collaboration with Vittorio Del Duca, Einan Gardi and others, I have studied the high-energy ('Regge') limit of gauge theory amplitudes from an infrared standpoint. I have shown that the all-order knowledge which is available on the infrared structure of fixed-angle amplitudes can be used to determine the high-energy limit beyond the naïve Regge-pole based high-energy factorization, which breaks down beyond next-to-leading logarithmic accuracy [17, 18]. The general structure of infrared poles associated with Regge cuts in the angular momentum plane can be determined, and concrete predictions can be made for three-loop parton amplitudes in QCD [13, 9].

- Soft anomalous dimensions

  In collaboration with Einan Gardi, Chris White hand others, I am pursuing the complete calculation of the three-loop soft anomalous dimension for generic multi-particle gauge theory amplitudes. This calculation would have important theoretical implications, possibly displaying the earliest violations of the dipole formula, in the form of quadrupole corrections in the massless limit, but also broad phenomenological applications, since it would provide the missing ingredient for N^3LL soft-gluon resummations for a range of processes including global jet observables and cross sections involving top quark production. A first step was taken in [11], where a class of diagrams contributing to soft-gluon exponentiation was analyzed to all orders in perturbation theory, including for the first time a well-defined contribution to the four-loop soft anomalous dimension.

6. **Other scientific activities.**

- *Refereeing*

  I have been a Referee for the following journals.

  - *Acta Physica Polonica* **B**
  - *Central European Journal of Physics*
  - *European Physical Journal A*
  - *European Physical Journal C*
  - *Journal of High Energy Physics*
  - *Nuclear Physics* **B**
  - *Physical Review* **D**
  - *Physical Review Letters*
  - *Physics Letters* **B**

I have acted in a refereeing capacity for different organizations.

- Member of the international referee pool for the "Fondazione Cariparo" (a banking foundation) for the selection of research projects of excellence to be funded (2007 – 2008).
- Project Referee for the USA National Science Foundation (Career Program and International Research Fellow Awards, 2008 – 2009).
- Member of the Scientific Council for "2I3T", a joint venture of the University of Torino and local governments providing help to spin off economically viable companies marketing results of academic research (2007 – 2010).
- Expert Evaluator for the Italian Ministry of Education and Research, Programs "SIR" and "Levi Montalcini", 2012, 2014 and 2015.
- Expert Evaluator of the Physics Evaluation Panel for the Research Executive Agency (REA) of the European Union ("People" program of the 7th Framework FP7), 2011 and 2012.
- Vice-Chair of the Physics Evaluation Panel for the Research Executive Agency (REA) of the European Union ("People" program of the 7th Framework FP7), 2013.
- Expert Evaluator of the Physics Evaluation Panel for the Research Executive Agency (REA) of the European Union ("Marie Slodowska Curie Action" of the 8th Framework H2020), 2014, 2015 and 2016.

- *Workshop and School Organization*
  - Organizer of the workshop "Renormalons and Power Corrections", NORDITA, Copenhagen, August 1996.
  - Coordinator of the working group on resummations in QCD, in the workshop "Standard Model Physics (and more) at the LHC", CERN, 1999.
  - Organizer of the "Torino Graduate School in Physics at Colliders", third and fourth editions, Torino, January 2008 and July 2009.
  - Member of the International Advisory Committee for the Conferences "Amplitudes 2015", Zurich, July 2015 and "Amplitudes 2017", Edinburgh, July 2017 and "Amplitudes 2018", SLAC June 2018.

- *Participation in Conferences and Workshop*
  - I routinely take part and give invited talks in international conferences and workshops in theoretical high energy physics. I am

regularly invited to present my work or review recent advances in my field at academic and research institutions worldwide.

Recent presentations are listed and available at

http://personalpages.to.infn.it/~magnea/index.html

- *Research Grants*
  - Member of the European Research and Training Networks: QCD-NET (1998 – 2001), Physics at Colliders (2001 – 2005), HEPTOOLS (2006 – 2009) and HIGGSTOOLS (2014 – 2018).
  - My research has been funded throughout my career by refereed Research Initiatives of the "Istituto Nazionale di Fisica Nucleare" (INFN), of which I am an Associate Scientist.
  - Member of competitively awarded "Research Projects of National Relevance" (PRIN) financed by the Italian Ministry of Education in 1997, 1999, 2001, 2004, 2006, 2009, 2012.
  - Member of the IMPACT (Innovative Methods for Particle Colliders at the Terascale) group, recipient of competitively awarded research funds from the Fondazione San Paolo (a banking foundation) and the University of Torino (2011 – 2014).

7. Referees

The following senior scientists have agreed to act as referees on my behalf, and are available to provide information about myself if contacted at the e-mail addresses listed below.

- Prof. Michele Caselle (Università di Torino):
  caselle@to.infn.it
- Prof. Lance Dixon (SLAC):
  lance@slac.stanford.edu
- Prof. Eric Laenen (NIKHEF):
  t45@nikhef.nl
- Prof. Peter Lepage (Cornell University):
  gpl3@cornell.edu
- Prof. George Sterman (SUNY at Stony Brook):
  sterman@max2.physics.sunysb.edu

Lorenzo Magnea

Publication List

[1] D. Bonocore, E. Laenen, L. Magnea, L. Vernazza and C. White,
JHEP **1612** (2016) 121, arXiv:1610.06842 [hep-ph].
"Non-abelian factorisation for next-to-leading-power threshold logarithms"

[2] L. Magnea, D. Bonocore, E. Laenen, L. Vernazza and C. White,
in *Leipzig 2016, Proceedings* "Loops and Legs 2016", PoS LL **2016** 078,
"On non-abelian next-to-leading-power threshold logarithms"

[3] D. Bonocore, E. Laenen, L. Magnea, S. Melville, L. Vernazza and C. White,
in *Los Angeles 2015, Proceedings* "RadCor 2015", PoS (RADCOR2015) 013,
arXiv:1602.01988 [hep-ph].
"Next-to-leading power threshold logarithms: a status report"

[4] L. Magnea,
in *Trento 2015, Proceedings* "Physics prospects for linear and other future collliders", Frascati Physics Series LXI, 184, arXiv:1601.02113 [hep-ph].
"The growing toolbox of perturbative QCD"

[5] S. Forte *et al.*,
Eur. Phys. J. **C 75** (2015) 554, arXiv:1505.01279 [hep-ph].
"The Standard Model from LHC to future colliders"

[6] L. Magnea, S. Playle, R. Russo and S. Sciuto,
JHEP **1506** (2015) 146, arXiv:1503.05182 [hep-th].
"Two-loop Yang-Mills diagrams from superstring amplitudes"

[7] D. Bonocore, E. Laenen, L. Magnea, S. Melville, L. Vernazza and C.D. White,
JHEP **1506** (2015) 8, arXiv:1503.05156 [hep-ph].
"A factorization approach to next-to-leading-power threshold logarithms"

[8] D. Bonocore, E. Laenen, L. Magnea, L. Vernazza and C.D. White,
Phys. Lett. **B 742** (2015) 375, arXiv:1410.6406 [hep-ph].
"The method of regions and next-to-soft corrections in Drell-Yan production"

[9] V. Del Duca, G. Falcioni, L. Magnea and L. Vernazza,
JHEP **1502** (2015) 29, arXiv:1409.8330 [hep-ph].
"Analyzing high-energy factorization beyond next-to-leading logarithmic accuracy"

[10] L. Magnea,
in *Weimar 2014, Proceedings* "Loops and Legs 2014", PoS (LL2014) 073, arXiv:1408.0682 [hep-ph].
"Progress on the infrared structure of multi-particle gauge theory amplitudes"

[11] G. Falcioni, E. Gardi, M. Harley, L. Magnea and C.D. White,
JHEP **1410** (2014) 10, arXiv:1407.3477 [hep-ph].
"Multiple Gluon Exchange Webs"

[12] V. Del Duca, G. Falcioni, L. Magnea and L. Vernazza,
in *Lumley Castle 2013, Proceedings* "RadCor 2013", PoS (RADCOR2013) 046, arXiv:1312.5098 [hep-ph].
"Beyond Reggeization for two- and three-loop QCD amplitudes"

[13] V. Del Duca, G. Falcioni, L. Magnea and L. Vernazza,
Phys. Lett. **B 732** (2014) 233, arXiv:1311.0304 [hep-ph].
"High-energy QCD amplitudes at two loops and beyond"

[14] L. Magnea, S. Playle, R. Russo and S. Sciuto,
JHEP **1309** (2013) 081, arXiv:1305.6631 [hep-th].
"Multi-loop open string amplitudes and their field theory limit"

[15] V. Del Duca, C. Duhr, E. Gardi, L. Magnea and C.D. White,
in *Wernigerode 2012, Proceedings* "Loops and Legs 2012", PoS (LL2012) 008, arXiv:1210.6786 [hep-ph].
"Infrared singularities in the high-energy limit"

[16] V. Del Duca, C. Duhr, E. Gardi, L. Magnea and C.D. White,

in *Mamallapuram 2011, Proceedings* "RadCor 2011", PoS (RADCOR2011) 038, arXiv:1201.2841 [hep-ph].

"Infrared singularities and the high-energy limit"

[17] V. Del Duca, C. Duhr, E. Gardi, L. Magnea and C.D. White,

JHEP **1112** (2011) 021, arXiv:1109.3581 [hep-ph].

"The infrared structure of gauge theory amplitudes in the high-energy limit"

[18] V. Del Duca, C. Duhr, E. Gardi, L. Magnea and C.D. White,

Phys. Rev. **D 85** (2012) p. 071104, arXiv:1108.5947 [hep-ph].

"An infrared approach to Reggeization"

[19] E. Laenen, L. Magnea, G. Stavenga and C.D. White,

JHEP **1101** (2011) 141, arxiv:1010.1860 [hep-ph].

"Next-to-eikonal corrections to soft gluon radiation: a diagrammatic approach"

[20] E. Laenen, L. Magnea, G. Stavenga and C.D. White,

in *Woerlitz 2010, Proceedings* "Loops and Legs in Quantum Field Theory", *Nucl. Phys. Proc. Suppl.* **B 205-206** (2010) p. 260, arxiv:1007.0624 [hep-ph].

"On next-to-eikonal exponentiation"

[21] J.R. Andersen *et al.*,

in *Les Houches 2009, Proceedings* "Physics at TeV colliders", arXiv:1003:1241 [hep-ph].

"The SM and NLO Multileg Working Group: Summary report"

[22] L.J. Dixon, E. Gardi and L. Magnea,

in *Ascona 2009, Proceedings* "RadCor 2009", PoS (RADCOR2009) 007, arXiv:1001.4709 [hep-ph].

"All-order results for infrared and collinear singularities in massless gauge theories"

[23] L.J. Dixon, E. Gardi and L. Magnea,
JHEP **1002** (2010) 081, arXiv:0910.3653 [hep-ph].
"On soft singularities at three loops and beyond"

[24] E. Gardi and L. Magnea,
in *La Thuile 2009, Proceedings*, *Nuovo Cim.* **032C** (2009) 137, arXiv:0908.3273 [hep-ph].
"Infrared singularities in QCD amplitudes"

[25] A. Mukherjee *et al.*,
in *Chennai 2008, Proceedings* "WHEPP X", *Pramana* **72** (2009) 277.
"Working group report: quantum chromodynamics sub-group"

[26] E. Gardi and L. Magnea,
JHEP **0309** (2009) 079, arXiv:0901.1091 [hep-ph].
"Factorization constraints for soft anomalous dimensions in QCD scattering amplitudes"

[27] E. Laenen, L. Magnea and G. Stavenga,
Phys. Lett. **B 669** (2008) 173, arXiv:0807.4412 [hep-ph].
"On next-to-eikonal corrections to threshold resummation for the Drell-Yan and DIS cross sections"

[28] L. Magnea,
in *Chennai 2008, Proceedings* "WHEPP X", *Pramana* **72** (2009) 69, arXiv:0806.3353 [hep-ph].
"All-order results for soft and collinear gluons"

[29] L.J. Dixon, L. Magnea and G. Sterman,
JHEP **0808** (2008) 022, arXiv:0805.3515 [hep-ph].
"Universal structure of subleading infrared poles in gauge theory amplitudes"

[30] M. Dasgupta, L. Magnea and G. Salam,
in *La Thuile 2008* and *Moriond 2008 Proceedings*, ed. M. Greco, Frascati Physics Series **47** (2008) 221, arXiv:0805.2267 [hep-ph].
"Analytical studies for non-perturbative QCD of jets at hadron colliders"

[31] M. Dasgupta, L. Magnea and G. Salam,

JHEP **0802** (2008) 55, arXiv:0712.3014 [hep-ph].

"Non-perturbative QCD effects in jets at hadron colliders"

[32] M. Cacciari, M. Dasgupta, L. Magnea and G. Salam,

in *Munich 2007 Proceedings* "DIS 2007", Atlantis Press, ed. G. Grindhammer e K. Sachs, p. 1023, arXiv:0706.3157 [hep-ph].

"Power corrections for jets at hadron colliders"

[33] G. Corcella and L. Magnea,

in *Milos 2006, Proceedings* "Diffraction 2006", *PoS DIFF2006* (2006) 35.

"Soft resummation corrections to parton distributions"

[34] E. Laenen and L. Magnea,

in *Eisenach 2006, Proceedings* "Loops and Legs 2006", ed. J. Bluemlein, S. Moch e T. Riemann, *Nucl. Phys. Proc. Suppl.* **160** (2006) p. 240, hep-ph/0607194.

"Refining threshold resummations"

[35] L. Magnea,

in *Paris 2006, Proceedings* "FRIF Workshop on first principles non-perturbative QCD of jets", eConf C0601121, hep-ph/0606168.

"Angularities and other shapes"

[36] C. Buttar *et al.*,

in *Les Houches 2005, Proceedings* "Physics at TeV colliders", eds. G. Belanger *et al.*, hep-ph/0604120.

"Standard Model and Higgs Working Group: Summary Report"

[37] S. Alekhin *et al.*,

in *CERN-DESY 2005, Proceedings* "HERA-LHC Workshop", ed. A. De Roeck e H. Jung, hep-ph/0601012 and hep-ph/0601013.

"HERA and the LHC: a Workshop on the implications of HERA for LHC Physics"

[38] E. Laenen and L. Magnea,

Phys. Lett. **B 632** (2006) p. 270, hep-ph/0508284.

"Threshold resummation for electroweak annihilation from DIS data"

[39] G. Corcella and L. Magnea,

in *Madison 2005 Proceedings* "DIS 2005", ed. W.H. Smith e S.R. Dasu, *AIP Conf. Proc.* **792** (2005) p. 303, hep-ph/0506278.

"Impact of large-x resummation on parton distribution functions"

[40] G. Corcella and L. Magnea,

Phys. Rev. **D 72** (2005) 074017, hep-ph/0506278,

"Soft gluon resummation effects on parton distributions"

[41] L. Magnea, R. Russo and S. Sciuto,

Int. Jour. Mod. Phys. **A 21** (2006) p. 553, hep-th/0412087.

"Two-loop Euler-Heisenberg effective actions from charged open strings"

[42] L. Magnea,

in *Štrbské Pleso 2004, Proceedings* "DIS 2004", eds. D. Bruncko *et al.*, p. 672, hep-ph/0409209.

"Sudakov logs and power corrections for selected event shapes"

[43] C.F. Berger and L. Magnea,

Phys. Rev. **D 70** (2004) p. 094010, hep-ph/0407024.

"Scaling of power corrections for angularities from dressed gluon exponentiation"

[44] M. Dobbs *et al.*,

in *Les Houches 2003, Proceedings* "Physics at TeV colliders", eds. G. Belanger *et al.*, p. 291, hep-ph/0403100.

"QCD/SM Working Group: Summary Report"

[45] T.O. Eynck, E. Laenen and L. Magnea,

in *St. Petersburg 2003, Proceedings* "DIS 2003", eds. V.T. Kim and L.N. Lipatov, p. 564, hep-ph/0310271.

"Exponentiation at partonic threshold for the Drell–Yan cross section"

[46] E. Gardi and L. Magnea,

JHEP **0308** (2003) p. 30, hep-ph/0306094.

"The C parameter distribution in e^+e^- annihilation"

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