

Free Full Text from Publisher

Look Up Full Text

Find PDF

Full Text Options

Export...

Add to Marked List

◀ 1 of 1 ▶

Measurement of quark- and gluon-like jet fractions using jet charge in PbPb and pp collisions at 5.02 TeV

By: Sirunyan, AM (Sirunyan, A. M.)^[1]; Tumasyan, A (Tumasyan, A.)^[1]; Adam, W (Adam, W.)^[2]; Ambrogio, F.)^[2]; Asilar, E (Asilar, E.)^[2]; Bergauer, T (Bergauer, T.)^[2]; Brandstetter, J (Brandstetter, J.)^[2]; Dragicevic, M (Dragicevic, M.)^[2]; Ero, J (Ero, J.)^[2]; Del Valle, AE (Del Valle, A. Escalante)^[2] ...More

Group Author(s): CMS Collaboration

[View Web of Science ResearcherID and ORCID](#)

JOURNAL OF HIGH ENERGY PHYSICS

Issue: 7

Article Number: 115

DOI: 10.1007/JHEP07(2020)115

Published: JUL 17 2020

Document Type: Article

[View Journal Impact](#)

Abstract

The momentum-weighted sum of the electric charges of particles inside a jet, known as jet charge, is sensitive to the electric charge of the particle initiating the parton shower. This paper presents jet charge distributions in root sNN = 5.02 TeV lead-lead (PbPb) and proton-proton (pp) collisions recorded with the CMS detector at the LHC. These data correspond to integrated luminosities of 404 mu b(-1) and 27.4 pb(-1) for PbPb and pp collisions, respectively. Leveraging the sensitivity of the jet charge to fundamental differences in the electric charges of quarks and gluons, the jet charge distributions from simulated events are used as templates to extract the quark- and gluon-like jet fractions from data. The modification of these jet fractions is examined by comparing pp and PbPb data as a function of the overlap of the colliding Pb nuclei (centrality). This measurement tests the color charge dependence of jet energy loss due to interactions with the quark-gluon plasma. No significant modification between different centrality classes and with respect to pp results is observed in the extracted quark- and gluon-like jet fractions.

Keywords

Author Keywords: [Hadron-Hadron scattering \(experiments\)](#); [Heavy-ion collision](#); [Jets](#)

KeyWords Plus: [RETENTION](#)

Author Information

Reprint Address:

Yerevan Physics Institute Yerevan Phys Inst, Yerevan, Armenia.

Corresponding Address: Sirunyan, AM (corresponding author)

+ Yerevan Phys Inst, Yerevan, Armenia.

Addresses:

- + [1] Yerevan Phys Inst, Yerevan, Armenia
- [2] Inst Hochenergiephys, Vienna, Austria
- + [3] Inst Nucl Problems, Minsk, BELARUS
- + [4] Univ Antwerp, Antwerp, Belgium
- + [5] Vrije Univ Brussel, Brussels, Belgium
- + [6] Univ Libre Bruxelles, Brussels, Belgium
- + [7] Univ Ghent, Ghent, Belgium
- + [8] Catholic Univ Louvain, Louvain, Belgium
- + [9] Ctr Brasileiro Pesquisas Fis, Rio De Janeiro, Brazil
- + [10] Univ Estado Rio de Janeiro, Rio De Janeiro, Brazil
- + [11] Univ Estadual Paulista, Sao Paulo, Brazil
- + [12] Univ Fed ABC, Sao Paulo, Brazil
- + [13] Bulgarian Acad Sci, Inst Nucl Res & Nucl Energy, Sofia, Bulgaria
- + [14] Univ Sofia, Sofia, Bulgaria
- + [15] Beihang Univ, Beijing, Peoples R China

Citation Network

In Web of Science Core Collection

0

Times Cited

Create Citation Alert

58

Cited References

[View Related Records](#)

New! You may also like ... BETA

Measurement of the cross section for t(t)-bar production with additional jets and b jets in pp collisions at root s=13TeV.

JOURNAL OF HIGH ENERGY PHYSICS (2020)

Observation of a new boson at a mass of 125 GeV with the CMS experiment at the LHC.

PHYSICS LETTERS B (2012)

Topology Communication

Photoconverters Matrix of High-power Coherent Monochromatic Radiation. 2019 PHOTONICS & ELECTROMAGNETICS RESEARCH SYMPOSIUM - SPRING (PIERS-SPRING) (2019)

A new insight into LPSO transformation during multi-axial forging in Mg-Gd-Y-Zr alloy.

MATERIALS LETTERS (2020)

Nonleptonic and semileptonic Lambda(b) -> Lambda(c) transitions in a potential quark model.

EUROPEAN PHYSICAL JOURNAL C (2020)

[View all suggestions](#)

Use in Web of Science

Web of Science Usage Count

8

8

Last 180 Days

Since 2013

[Learn more](#)

This record is from:

Web of Science Core Collection

- Science Citation Index Expanded

Suggest a correction

If you would like to improve the quality of the data in this record, please [suggest a correction](#).

- + [16] Inst High Energy Phys, Beijing, Peoples R China
- + [17] Peking Univ, State Key Lab Nucl Phys Technol, Beijing, Peoples R China
- + [18] Tsinghua Univ, Beijing, Peoples R China
- + [19] Univ Los Andes, Bogota, Colombia
- + [20] Univ Antioquia, Medellin, Colombia
- + [21] Univ Split, Fac Elect Engrn Mech Engrn & Naval Architecture, Split, Croatia
- + [22] Univ Split, Fac Sci, Split, Croatia
- + [23] Inst Rudjer Boskovic, Zagreb, Croatia
- + [24] Univ Cyprus, Nicosia, Cyprus
- + [25] Charles Univ Prague, Prague, Czech Republic
- + [26] Escuela Politec Nacl, Quito, Ecuador
- [27] Univ San Francisco Quito, Quito, Ecuador
- + [28] Egyptian Network High Energy Phys, Acad Sci Res & Technol Arab Republ Egypt, Cairo, Egypt
- + [29] NICPB, Tallinn, Estonia
- + [30] Univ Helsinki, Dept Phys, Helsinki, Finland
- + [31] Helsinki Inst Phys, Helsinki, Finland
- + [32] Lappeenranta Univ Technol, Lappeenranta, Finland
- + [33] Univ Paris Saclay, CEA, IRFU, Gif Sur Yvette, France
- + [34] Univ Paris Saclay, CNRS, Ecole Polytech, Lab Leprince Ringuet,IN2P3, Palaiseau, France
- + [35] Univ Strasbourg, CNRS, UMR 7178, IPHC, Strasbourg, France
- + [36] Ctr Calcul Inst Natl Phys Nucl & Phys Particules, CNRS, IN2P3, Villeurbanne, France
- + [37] Univ Lyon, Univ Claude Bernard Lyon 1, CNRS, Inst Phys Nucl Lyon,IN2P3, Villeurbanne, France
- + [38] Georgian Tech Univ, Tbilisi, Georgia
- + [39] Tbilisi State Univ, Tbilisi, Georgia
- + [40] Rhein Westfal TH Aachen, Phys Inst 1, Aachen, Germany
- + [41] Rhein Westfal TH Aachen, Phys Inst A 3, Aachen, Germany
- + [42] Rhein Westfal TH Aachen, Phys Inst B 3, Aachen, Germany
- [43] Deutch Elektronen Synchrotron, Hamburg, Germany
- + [44] Univ Hamburg, Hamburg, Germany
- + [45] Karlsruher Inst Technol, Karlsruhe, Germany
- + [46] INPP, NCSR Demokritos, Aghia Paraskevi, Greece
- + [47] Natl & Kapodistrian Univ Athens, Athens, Greece
- + [48] Natl Tech Univ Athens, Athens, Greece
- + [49] Univ Ioannina, Ioannina, Greece
- + [50] Eotvos Lorand Univ, MTA ELTE Lendulet CMS Particle & Nucl Phys Grp, Budapest, Hungary
- + [51] Wigner Res Ctr Phys, Budapest, Hungary
- + [52] Inst Nucl Res ATOMKI, Debrecen, Hungary
- + [53] Univ Debrecen, Inst Phys, Debrecen, Hungary
- + [54] Indian Inst Sci IISc, Bangalore, Karnataka, India
- + [55] Natl Inst Sci Educ Res, HBNI, Bhubaneswar, Orissa, India
- + [56] Panjab Univ, Chandigarh, India
- + [57] Univ Delhi, Delhi, India
- + [58] Saha Inst Nucl Phys, HBNI, Kolkata, India
- + [59] Indian Inst Technol Madras, Madras, Tamil Nadu, India
- + [60] Bhabha Atom Res Ctr, Mumbai, Maharashtra, India
- + [61] Tata Inst Fundamental Res A, Mumbai, Maharashtra, India
- + [62] Tata Inst Fundamental Res B, Mumbai, Maharashtra, India
- + [63] IISER, Pune, Maharashtra, India
- [64] Inst Res Fundamental Sci IPM, Tehran, Iran
- + [65] Univ Coll Dublin, Dublin, Ireland
- + [66] INFN, Sez Bari, Bari, Italy
- + [67] Univ Bari, Bari, Italy

- + [68] Politecn Bari, Bari, Italy
- + [69] INFN, Sez Bologna, Bologna, Italy
- + [70] Univ Bologna, Bologna, Italy
- + [71] INFN, Sez Catania, Catania, Italy
- + [72] Univ Catania, Catania, Italy
- + [73] INFN, Sez Firenze, Florence, Italy
- + [74] Univ Firenze, Florence, Italy
- + [75] INFN, Lab Nazl Frascati, Frascati, Italy
- + [76] INFN, Sez Genova, Genoa, Italy
- + [77] Univ Genoa, Genoa, Italy
- + [78] INFN, Sez Milano Bicocca, Milan, Italy
- + [79] Univ Milano Bicocca, Milan, Italy
- + [80] INFN, Sez Napoli, Naples, Italy
- + [81] Univ Napoli Federico II, Rome, Italy
- + [82] Univ Basilicata, Potenza, Italy
- + [83] Univ G Marconi, Rome, Italy
- [84] INFN, Sez Padova, Trento, NJ USA
- + [85] Univ Padua, Padua, Italy
- + [86] Univ Trento, Trento, Italy
- + [87] INFN, Sez Pavia, Pavia, Italy
- + [88] Univ Pavia, Pavia, Italy
- + [89] INFN, Sez Perugia, Perugia, Italy
- + [90] Univ Perugia, Perugia, Italy
- + [91] INFN, Sez Pisa, Pisa, Italy
- + [92] Univ Pisa, Pisa, Italy
- + [93] Scuola Normale Super Pisa, Pisa, Italy
- + [94] INFN, Sez Roma, Rome, Italy
- + [95] Sapienza Univ Roma, Rome, Italy
- + [96] INFN, Sez Torino, Novara, Italy
- + [97] Univ Torino, Novara, Italy
- + [98] Univ Piemonte Orientale, Novara, Italy
- + [99] INFN, Sez Trieste, Trieste, Italy
- + [100] Univ Trieste, Trieste, Italy
- + [101] Kyungpook Natl Univ, Daegu, South Korea
- + [102] Chonnam Natl Univ, Inst Univ Elementary Particles, Kwangju, South Korea
- + [103] Hanyang Univ, Seoul, South Korea
- + [104] Korea Univ, Seoul, South Korea
- + [105] Sejong Univ, Seoul, South Korea
- + [106] Seoul Natl Univ, Seoul, South Korea
- + [107] Univ Seoul, Seoul, South Korea
- + [108] Sungkyunkwan Univ, Suwon, South Korea
- + [109] Vilnius Univ, Vilnius, Lithuania
- + [110] Univ Malaya, Natl Ctr Particle Phys, Kuala Lumpur, Malaysia
- + [111] Univ Sonora UNISON, Hermosillo, Sonora, Mexico
- + [112] Ctr Invest & Estudios Avanzados IPN, Mexico City, DF, Mexico
- [113] Univ Iberoamer, Mexico City, DF, Mexico
- + [114] Benemerita Univ Autonoma Puebla, Puebla, Mexico
- + [115] Univ Autonoma San Luis Potosi, San Luis Potosi, Mexico
- + [116] Univ Auckland, Auckland, New Zealand
- + [117] Univ Canterbury, Christchurch, New Zealand
- + [118] Quaid I Azam Univ, Natl Ctr Phys, Islamabad, Pakistan
- + [119] Natl Ctr Nucl Res, Otwock, Poland

- + [120] Univ Warsaw, Inst Expt Phys, Fac Phys, Warsaw, Poland
- + [121] Lab Instrumentacao & Fis Expt Particulas, Lisbon, Portugal
- + [122] Joint Inst Nucl Res, Dubna, Russia
- + [123] Petersburg Nucl Phys Inst Gatchina, St Petersburg, Russia
- + [124] Inst Nucl Res, Moscow, Russia
- + [125] Inst Theoret Expt Phys, Moscow, Russia
- + [126] Moscow Inst Phys Technol, Moscow, Russia
- + [127] Natl Res Nucl Univ, Moscow Engr Phys Inst MEPhI, Moscow, Russia
- + [128] PN Lebedev Phys Inst, Moscow, Russia
- + [129] Lomonosov Moscow State Univ, Skobeltsyn Inst Nucl Phys, Moscow, Russia
- + [130] NSU, Novosibirsk, Russia
- + [131] State Res Ctr Russian Federat, NRC Kurchatov Inst, Inst High Energy Phys, Protvino, Russia
- + [132] Natl Res Tomsk Polytech Univ, Tomsk, Russia
- + [133] Univ Belgrade, Fac Phys, Belgrade, Serbia
- + [134] Vinca Inst Nucl Sci, Belgrade, Serbia
- [135] Ctr Invest Energet Medioambient Tecnol CIEM, Madrid, Spain
- + [136] Univ Autonoma Madrid, Madrid, Spain
- + [137] Univ Oviedo, Oviedo, Spain
- + [138] Univ Cantabria, Inst Fis Cantabria IFCA, CSIC, Santander, Spain
- + [139] CERN, European Org Nucl Res, Geneva, Switzerland
- + [140] Paul Scherrer Inst, Villigen, Switzerland
- [141] ETH Zurich Inst Particle Phys & Astrophys IPA, Zurich, Switzerland
- + [142] Univ Zurich, Zurich, Switzerland
- + [143] Natl Cent Univ, Chungli, Taiwan
- + [144] NTU, Taipei, Taiwan
- + [145] Chulalongkorn Univ, Dept Phys, Fac Sci, Bangkok, Thailand
- + [146] Cukurova Univ, Dept Phys, Sci & Art Fac, Adana, Turkey
- + [147] Middle East Tech Univ, Dept Phys, Ankara, Turkey
- + [148] Bogazici Univ, Istanbul, Turkey
- + [149] Istanbul Tech Univ, Istanbul, Turkey
- + [150] Natl Acad Sci Ukraine, Inst Scintillat Mat, Kharkov, Ukraine
- + [151] Kharkov Inst Phys Technol, Natl Sci Ctr, Kharkov, Ukraine
- + [152] Univ Bristol, Bristol, Avon, England
- [153] Rutherford Appleton Lab, Didcot, Oxon, England
- + [154] Imperial Coll, London, England
- + [155] Brunel Univ, Uxbridge, Middx, England
- + [156] Baylor Univ, Waco, TX 76798 USA
- + [157] Catholic Univ Amer, Washington, DC 20064 USA
- + [158] Univ Alabama, Tuscaloosa, AL USA
- + [159] Boston Univ, Boston, MA 02215 USA
- + [160] Brown Univ, Providence, RI 02912 USA
- + [161] Univ Calif Davis, Davis, CA 95616 USA
- + [162] Univ Calif Los Angeles, Los Angeles, CA USA
- + [163] Univ Calif Riverside, Riverside, CA 92521 USA
- + [164] Univ Calif San Diego, La Jolla, CA 92093 USA
- + [165] Univ Calif Santa Barbara, Dept Phys, Santa Barbara, CA 93106 USA
- + [166] CALTECH, Pasadena, CA 91125 USA
- + [167] Carnegie Mellon Univ, Pittsburgh, PA 15213 USA
- + [168] Univ Colorado Boulder, Boulder, CO 80309 USA
- + [169] Cornell Univ, Ithaca, NY USA
- + [170] Fermilab Natl Accelerator Lab, Batavia, IL 60510 USA
- + [171] Univ Florida, Gainesville, FL USA

- [172] Florida Int Univ, Miami, FL 33199 USA
- [173] Florida State Univ, Tallahassee, FL 32306 USA
- [174] Florida Inst Technol, Melbourne, FL 32901 USA
- [175] Univ Illinois Chicago UIC, Chicago, IL USA
- [176] Univ Iowa, Iowa City, IA USA
- [177] Johns Hopkins Univ, Baltimore, MD USA
- [178] Univ Kansas, Lawrence, KS 66045 USA
- [179] Kansas State Univ, Manhattan, KS 66506 USA
- [180] Lawrence Livermore Natl Lab, Livermore, CA USA
- [181] Univ Maryland, College Pk, MD 20742 USA
- [182] MIT, 77 Massachusetts Ave, Cambridge, MA 02139 USA
- [183] Univ Minnesota, Minneapolis, MN USA
- [184] Univ Mississippi, Oxford, MS USA
- [185] Univ Nebraska, Lincoln, NE USA
- [186] SUNY Buffalo, New York, NY USA
- [187] Northeastern Univ, Boston, MA 02115 USA
- [188] Northwestern Univ, Evanston, IL USA
- [189] Univ Notre Dame, Notre Dame, IN 46556 USA
- [190] Ohio State Univ, Columbus, OH 43210 USA
- [191] Princeton Univ, Princeton, NJ 08544 USA
- [192] Univ Puerto Rico, Mayaguez, PR USA
- [193] Purdue Univ, W Lafayette, IN 47907 USA
- [194] Purdue Univ Northwest, Hammond, IN USA
- [195] Rice Univ, Houston, TX USA
- [196] Univ Rochester, Rochester, NY USA
- [197] Rutgers State Univ, Piscataway, NJ USA
- [198] Univ Tennessee, Knoxville, TN USA
- [199] Texas A&M Univ, College Stn, TX USA
- [200] Texas Tech Univ, Lubbock, TX 79409 USA
- [201] Vanderbilt Univ, 221 Kirkland Hall, Nashville, TN 37235 USA
- [202] Univ Virginia, Charlottesville, VA USA
- [203] Wayne State Univ, Detroit, MI USA
- [204] Univ Wisconsin, Madison, WI USA
- [205] Vienna Univ Technol, Vienna, Austria
- [206] Univ Paris Saclay, IRFU, CEA, Gif Sur Yvette, France
- [207] Univ Estadual Campinas, Campinas, SP, Brazil
- [208] Univ Fed Rio Grande do Sul, Porto Alegre, RS, Brazil
- [209] Univ Libre Bruxelles, Brussels, Belgium
- [210] Univ Chinese Acad Sci, Beijing, Peoples R China
- [211] Inst Theoret & Expt Phys, Moscow, Russia
- [212] Joint Inst Nucl Res, Dubna, Russia
- [213] British Univ Egypt, Cairo, Egypt
- [214] Suez Univ, Suez, Egypt
- [215] Fayoum Univ, Al Fayyum, Egypt
- [216] King Abdulaziz Univ, Dept Phys, Jeddah, Saudi Arabia
- [217] Univ Haute Alsace, Mulhouse, France
- [218] Lomonosov Moscow State Univ, Skobel'syn Inst Nucl Phys, Moscow, Russia
- [219] CERN, European Org Nucl Res, Geneva, Switzerland
- [220] Rhein Westfal TH Aachen, Phys Inst A 3, Aachen, Germany
- [221] Univ Hamburg, Hamburg, Germany
- [222] Brandenburg Tech Univ Cottbus, Cottbus, Germany
- [223] Eotvos Lorand Univ, MTA ELTE Lendulet CMS Particle & Nucl Phys Grp, Budapest, Hungary

- + [224] Inst Nucl Res ATOMKI, Debrecen, Hungary
- + [225] Univ Debrecen, Inst Phys, Debrecen, Hungary
- + [226] IIT Bhubaneswar, Bhubaneswar, India
- + [227] Inst Phys, Bhubaneswar, Odisha, India
- + [228] Shoolini Univ, Solan, India
- + [229] Univ Visva Bharati, Santini Ketan, W Bengal, India
- + [230] Isfahan Univ Technol, Esfahan, Iran
- + [231] Islamic Azad Univ, Sci & Res Branch, Plasma Phys Res Ctr, Tehran, Iran
- + [232] Univ Siena, Siena, Italy
- + [233] Kyung Hee Univ, Seoul, South Korea
- + [234] Int Islamic Univ Malaysia, Kuala Lumpur, Malaysia
- + [235] MOSTI, Malaysian Nucl Agcy, Kajang, Malaysia
- [236] Consejo Nacl Ciencia & Technol, Mexico City, DF, Mexico
- + [237] Warsaw Univ Technol, Inst Elect Syst, Warsaw, Poland
- + [238] Inst Nucl Res, Moscow, Russia
- + [239] Natl Res Nucl Univ, Moscow Engn Phys Inst MEPhI, Moscow, Russia
- + [240] St Petersburg State Polytech Univ, St Petersburg, Russia
- + [241] Univ Florida, Gainesville, FL USA
- + [242] PN Lebedev Phys Inst, Moscow, Russia
- + [243] CALTECH, Pasadena, CA 91125 USA
- + [244] Budker Inst Nucl Phys, Novosibirsk, Russia
- + [245] Univ Belgrade, Fac Phys, Belgrade, Serbia
- + [246] Univ Pavia, INFN, Sez Pavia, Pavia, Italy
- + [247] Univ Belgrade, Fac Phys, Belgrade, Serbia
- + [248] Vinca Inst Nucl Sci, Belgrade, Serbia
- + [249] INFN, Scuola Normale & Sez, Pisa, Italy
- + [250] Natl & Kapodistrian Univ Athens, Athens, Greece
- + [251] Riga Tech Univ, Riga, Latvia
- + [252] Univ Zurich, Zurich, Switzerland
- [253] Stefan Meyer Inst Subat Phys SMI, Vienna, Austria
- + [254] Adiyaman Univ, Adiyaman, Turkey
- + [255] Istanbul Aydin Univ, Istanbul, Turkey
- + [256] Mersin Univ, Mersin, Turkey
- + [257] Piri Reis Univ, Istanbul, Turkey
- + [258] Gaziosmanpasa Univ, Tokat, Turkey
- + [259] Ozyegin Univ, Istanbul, Turkey
- + [260] Izmir Inst Technol, Izmir, Turkey
- + [261] Marmara Univ, Istanbul, Turkey
- + [262] Kafkas Univ, Kars, Turkey
- + [263] Istanbul Univ, Fac Sci, Istanbul, Turkey
- + [264] Istanbul Bilgi Univ, Istanbul, Turkey
- + [265] Hacettepe Univ, Ankara, Turkey
- + [266] Rutherford Appleton Lab, Didcot, Oxon, England
- + [267] Univ Southampton, Sch Phys & Astron, Southampton, Hants, England
- + [268] Monash Univ, Fac Sci, Clayton, Vic, Australia
- [269] Bethel Univ, St Paul, MN USA
- + [270] Karamanoglu Mehmetbey Univ, Karaman, Turkey
- + [271] Utah Valley Univ, Orem, UT USA
- + [272] Purdue Univ, W Lafayette, IN 47907 USA
- + [273] Beykent Univ, Istanbul, Turkey
- + [274] Bingol Univ, Bingol, Turkey
- + [275] Sinop Univ, Sinop, Turkey

- + [276] Mimar Sinan Univ, Istanbul, Turkey
- + [277] Texas A&M Univ Qatar, Doha, Qatar
- + [278] Kyungpook Natl Univ, Daegu, South Korea
- + [279] Univ Hyderabad, Hyderabad, India
- + [280] AGH Univ Sci & Technol, Fac Comp Sci Elect & Telecommun, PL-30059 Krakow, Poland

Funding

Funding Agency	Show details	Grant Number
BMBWF (Austria)		
Austrian Science Fund (FWF)		
Fonds de la Recherche Scientifique - FNRS		
FWO		
National Council for Scientific and Technological Development (CNPq)		
CAPES		
Carlos Chagas Filho Foundation for Research Support of the State of Rio de Janeiro (FAPERJ)		
Foundation for Research Support of the State of Rio Grande do Sul (FAPERGS)		
Fundacao de Amparo a Pesquisa do Estado de Sao Paulo (FAPESP)		
MES (Bulgaria)		
CERN		
Chinese Academy of Sciences		
Ministry of Science and Technology, China		
National Natural Science Foundation of China (NSFC)		
Departamento Administrativo de Ciencia, Tecnologia e Innovacion Colciencias		
MSES (Croatia)		
CSF (Croatia)		
RPF (Cyprus)		
SENESCYT (Ecuador)		
MoER (Estonia)		
Estonian Research Council		
PUT (Estonia)		
European Union (EU)		
Academy of Finland		
Spanish Government		
HIP (Finland)		
French Atomic Energy Commission		
Centre National de la Recherche Scientifique (CNRS)		
Federal Ministry of Education & Research (BMBF)		
German Research Foundation (DFG)		
HGF (Germany)		
Greek Ministry of Development-GSRT		
NKfIA (Hungary)		
Department of Atomic Energy (DAE)		
Department of Science & Technology (India)		
IPM (Iran)		
Science Foundation Ireland		
Istituto Nazionale di Fisica Nucleare (INFN)		
MSIP (Republic of Korea)		
NRF (Republic of Korea)		
MES (Latvia)		
LAS (Lithuania)		
MOE (Malaysia)		

UM (Malaysia)	
UASLP-FAI (Mexico)	
BUAP (Mexico)	
CINVESTAV (Mexico)	
Consejo Nacional de Ciencia y Tecnologia (CONACyT)	
LNS (Mexico)	
SEP (Mexico)	
MOS (Montenegro)	
MBIE (New Zealand)	
PAEC (Pakistan)	
NSC (Poland)	
MSHE (Poland)	
Portuguese Foundation for Science and Technology	
JINR (Dubna)	
NRC KI (Russia)	
MON (Russia)	
RosAtom (Russia)	
Russian Academy of Sciences	
Russian Foundation for Basic Research (RFBR)	
MESTD (Serbia)	
SEIDI (Spain)	
CPAN (Spain)	
PCTI (Spain)	
European Union (EU)	
MOSTR (Sri Lanka)	
MST (Taipei)	
NSTDA (Thailand)	
ThEPCenter (Thailand)	
IPST (Thailand)	
STAR (Thailand)	
Turkiye Bilimsel ve Teknolojik Arastirma Kurumu (TUBITAK)	
Ministry of Energy & Natural Resources - Turkey	
NASU (Ukraine)	
Science & Technology Facilities Council (STFC)	
United States Department of Energy (DOE)	
National Science Foundation (NSF)	

[View funding text](#)

Publisher

SPRINGER, ONE NEW YORK PLAZA, SUITE 4600, NEW YORK, NY, UNITED STATES

Journal Information

Impact Factor: [Journal Citation Reports](#)

Categories / Classification

Research Areas: Physics

Web of Science Categories: Physics, Particles & Fields

Document Information

Language: English

Accession Number: WOS:000550237400001

ISSN: 1029-8479

Other Information

IDS Number: MM6AP

Cited References in Web of Science Core Collection: 58

Times Cited in Web of Science Core Collection: 0

[See fewer data fields](#)

◀ 1 of 1 ▶

Cited References: 58Showing 30 of 58 [View All in Cited References page](#)

(from Web of Science Core Collection)

1. **Charge Properties of the Hadronic System in p and p Interactions** Times Cited: **1**
 \documentclass[12pt]{minimal} \usepackage{amsmath} \usepackage{wasysym} \usepackage{amsfonts} \usepackage{amssymb} \usepackage{amsbsy} \usepackage{mathrsfs} \usepackage{upgreek} \setlength{\oddsidemargin}{-69pt} \begin{document} $\overline{\nu}p$ \end{document}
 Group Author(s): Aachen-Bonn-CERN-Munich-Oxford collaboration
 Phys. Lett. B Volume: 112 Pages: 88 Published: 1982
2. **Observation of a Centrality-Dependent Dijet Asymmetry in Lead-Lead Collisions at $\sqrt{s(NN)}=2.76$ TeV with the ATLAS Detector at the LHC** Times Cited: **717**
 By: Aad, G.; Abbott, B.; Abdallah, J.; et al.
 Group Author(s): ATLAS Collaboration
 PHYSICAL REVIEW LETTERS Volume: 105 Issue: 25 Article Number: 252303 Published: DEC 13 2010
3. **Longitudinal Double-Spin Asymmetry and Cross Section for Inclusive Jet Production in Polarized Proton Collisions at $\sqrt{s}=200$ GeV** Times Cited: **134**
 By: Abelev, B. I.; Aggarwal, M. M.; Ahammed, Z.; et al.
 Group Author(s): Star Collaboration
 PHYSICAL REVIEW LETTERS Volume: 97 Issue: 25 Article Number: 252001 Published: DEC 18 2006
4. **Measurement of jet suppression in central Pb-Pb collisions at $\sqrt{s(NN)}=2.76$ TeV** Times Cited: **85**
 By: Adam, J.; Adamova, D.; Aggarwal, M. M.; et al.
 Group Author(s): ALICE Collaboration
 PHYSICS LETTERS B Volume: 746 Pages: 1-14 Published: JUN 30 2015
5. **Unfolding algorithms and test using RooUnfold** Times Cited: **103**
 By: Adye, T.
 Proceeding of the PHYSTAT 2011 Workshop Volume: 1 Pages: 313 Published: 2011
 arXiv: 1105.1160 [physics.data-an]
 URL: <https://doi-org.ezproxy.um.edu.my/10.5170/CERN-2011-006.313>
6. **GEANT4-a simulation toolkit** Times Cited: **12,840**
 By: Agostinelli, S; Allison, J; Amako, K; et al.
 NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH SECTION A-ACCELERATORS SPECTROMETERS DETECTORS AND ASSOCIATED EQUIPMENT Volume: 506 Issue: 3 Pages: 250-303 Published: JUL 1 2003
7. **QUARK CHARGE RETENTION IN FINAL-STATE HADRONS FROM DEEP INELASTIC MUON SCATTERING** Times Cited: **35**
 By: ALBANESE, JP; ARNEODO, M; ARVIDSON, A; et al.
 PHYSICS LETTERS B Volume: 144 Issue: 3-4 Pages: 302-308 Published: 1984
8. **Exploration of jet substructure using iterative declustering in pp and Pb-Pb collisions at LHC energies** Times Cited: **3**
 Group Author(s): ALICE collaboration
 Phys. Lett. B Volume: 802 Pages: 135227 Published: 2020
 arXiv:1905.02512
9. **MULTIPLICITY DISTRIBUTIONS IN NEUTRINO-HYDROGEN INTERACTIONS** Times Cited: **63**
 By: ALLEN, P; BLIETSCHAU, J; GRASSLER, H; et al.
 NUCLEAR PHYSICS B Volume: 181 Issue: 3 Pages: 385-402 Published: 1981
10. **Charged Hadron Multiplicities in High-energy $\sqrt{s_{NN}}$ and $\sqrt{s_{NN}}$ Interactions** Times Cited: **1**
 Group Author(s): Amsterdam-Bologna-Padua-Pisa-Saclay-Turin collaboration
 Z. Phys. C Volume: 14 Pages: 281 Published: 1982
11. **Charged Hadron Multiplicities in High-energy $\sqrt{s_{NN}}$ and $\sqrt{s_{NN}}$ Interactions** Times Cited: **1**
 Group Author(s): Amsterdam-Bologna-Padua-Pisa-Saclay-Turin collaboration
 Z. Phys. C Volume: 11 Pages: 283 Published: 1982
12. **Measurement of jet fragmentation in Pb+Pb and pp collisions at $\sqrt{s_{NN}}$** Times Cited: **7**
 \documentclass[12pt]{minimal} \usepackage{amsmath} \usepackage{wasysym} \usepackage{amsfonts} \usepackage{amssymb} \usepackage{amsbsy}