

Curriculum Vitae

Dr. Manjit Kaur, Professor (Rtd.)
Member, CMS Collaboration

Department of Physics
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<https://www.manjitkaur.info/#about-me>



PERSONAL INFORMATION

Name	Manjit Kaur
Professional name	Manjit Kaur (M. Kaur for Authorship)

OBJECTIVE A strong passion and focus for continuing research work, mentoring and development.

EDUCATION **D.Sc. (Physics), Ph.D. (High Energy Physics), MCA (Computer Science)**

Physics

D.Sc. (Physics)	Panjab University, India	2024
Ph.D. (Physics)	Panjab University, India	1981
M.Sc. (Physics, Hons. Sch.)	Panjab University, India	1975
B.Sc. (Physics, Hons. Sch.)	Panjab University, India	1974
B.Sc. (Phys. Chem. Math.)	Panjab University, India	1973
Certificate in German	Panjab University, India	1978

Computer Applications

PGDCA (Post Graduate Diploma)	IGNOU, Delhi, India	2003
ADCA (Advanced Diploma)	IGNOU, Delhi, India	2004
M.C.A. (Master of Comp. App.)	IGNOU, Delhi, India	2005

POSITIONS HELD

Professor Emeritus	Amity University, Punjab	8/2021 - present
Professor	Panjab University, India	10/2002 – 02/2019
Visiting Professor	Windsor University, Canada	08/2010–06/2011
Reader	Panjab University, India	10/1994 – 10/2002
Senior Lecturer	Panjab University, India	10/1984 – 10/1994
Lecturer	MCMDAV College, Panjab Univ.	08/1980 – 10/1984
SRF(CSIR)	Panjab University, India	08/1978 - 07/1980
JRF(CSIR)	Panjab University, India	07/1976 - 07/1978
HEP-Researcher	Panjab University, India	
	CMS project at CERN, Geneva.	ONGOING

HONOURS AND AWARDS

- **Laureate of 2025 Breakthrough Prize in Fundamental Physics** as co-author of publications based on CERN's Large Hadron Collider Run-2 data 2025

- Featured in the book, "**Women Shaping Scientific Frontiers: From Lab Coats to Leadership.**" Published by INSA, India in 2024.
 - First IAPT Professor HS Hans Memorial Silver Medal for distinguished work in Experimental Physics and work in IAPT 2023
 - Guilio Racah Fellowship, EMFCSC, Italy 1991
 - National Merit Scholarship (Physics) 1975
 - Invited by the **Nobel Committee** for Physics, Royal Swedish Academy of Sciences, to submit proposal/nominations For the award of Nobel Prize. 2011 & 2012
 - Amongst top 2% scientists world-wide Oct 2020
- Updated science-wide author databases..... Mendeley Data, V2 :**
<http://dx.doi.org/10.17632/btchxktzyw.2>

LEADERSHIP POSITIONS

- **Team Leader:** PU-CMS experiment at CERN, Geneva, Switzerland 2017- 2019
- **Deputy Spokesperson:** India-CMS Collaboration at CERN, Geneva, Switzerland 2012 - 2016
- **Member:** CMS Collaboration Board. 2017-Present
- **Vice President:** North Zone, Indian Association of Physics Teachers(IAPT) 2016- present
- **President:** Regional Council-3, IAPT, India 2012 - 2016
- **Secretary:** Regional Council-, IAPT, India 2008 - 2012
- **Editor:** Monthly Bulletin of IAPT, India 2016 - Present
- **Chairman:** Department of Physics, P.U. 06/2013 - 02/2014

ADMINISTRATIVE POSITIONS IN THE UNIVERSITY

- Member of the Senate, Panjab University, Chandigarh 2004-2008
- Member of the Syndicate and Senate, Panjab University 2008
- Chairperson of Department of physics, P.U. < 1 yr. 2013-2014

SERVICES ON PROFESSIONAL PANELS

- **Invited Scientist:** Int. School of Subnuclear Physics, EMFCSC, Erice, Italy 2006, 2015, 2016
- **Member,** selection panel for appointing Professors, Associate Professors and Assistant Professors at several Universities in India 2004-2018
- **Member,** PAC, SERC School on HEP, Sponsored by DST-GOI: 2010-2012
- **Member,** review committee for research proposals UGC: 2014
- **Member,** panel of experts of DST, GOI, to review HEP proposals. 2012-2016
- **Thesis Reviewer:** Ph.D. thesis reviewer for several National Universities and Institutes over about 20 years : Delhi University (DU), Tata Institute of Fundamental Research (TIFR), Mumbai, Saha Institute of Nuclear Physics (SINP) Kolkata, VECC, Kolkata, IIT, Mumbai, Jammu University and Sydney +University, Australia, etc.
- **Member** of several Selection Boards of P.U. and many universities
- **Convener** of several national/international conference sessions.

- Served for long as member, Board of Control, Faculty of Science, Panjab University, Kurukshetra University, MDU University - Rohtak etc. 2004 - 2014
- **Member:** Board of Studies of Pondicherry University 2020 -2024
- **Member:** Board of Studies of Chandigarh University 2016 -2022
- **Member:** Analysis Review Committee (ARC) of CMS Collab. 2018- Present

PARTICIPATION IN FRONTLINE HIGH ENERGY PHYSICS EXPERIMENTS

- **CMS Experiment at CERN**, Geneva, Switzerland 1999-Present
- **L3 Experiment at CERN**, Geneva, Switzerland :
Scientific Associate of CERN on the L3 experiment at CERN 1990-2005
- **ZEUS Experiment at DESY**, Hamburg, Germany 2007-2016
Max Planck Institute, Munich
- **EMU01 Collaboration** 1984-1991
To study interactions of pions and heavy-ions with emulsion nuclei at very high energies.

RESEARCH GRANTS RECEIVED

- **MEGA SCIENCE PROJECT Funding from DST-GOI, India**
CMS Experiment at CERN:
Principal Investigator 2014 - 2019
Co-Investigator 2000 - 2019
- No. of Major Research Projects as single PI = 5 1981 -2011
- No. of Minor Research Projects as single PI = 1 1983 - 1987
- No. Major Research Projects as joint PI. = 3 2004 - 2019
- **Funding agencies:** i) **DST**, New Delhi ii) **UGC**, Delhi iii) **CSIR**, Delhi, India
iv) **TWAS**, Trieste, Italy v) **Max Planck Institute**, Munich, Germany vi) **EMFCSC**,
Erice, Italy

ONGOING PHYSICS STUDIES PROJECTS

- Measurement of non-perturbative corrections (NP) in p-p collisions at $\sqrt{s} = 13$ TeV are being derived using the CMS data at LHC in comparison to the simulated data from various event generators. This work is being done as members of the CMS collaboration in Standard Model Physics Group (SMP-Had)
- Extraction of α_s from QCD Event Shapes of Electron-Positron annihilations at the Future Circular Collider (FCC-ee).
- Photoproduction in ep interactions at the future electron-ion collider (EIC).
- Investigation of Event Shape Variables as Discriminators of Jet Topology in High-Energy pp Collisions at the Large Hadron Collider at different energies.
- Multiplicity distributions in proton-proton and proton-antiproton interactions and the entanglement entropy measurement from Quantum Chromodynamics (QCD)

RESEARCH GUIDANCE

- Supervising undergraduate and graduate students, mentoring thesis work of M. Phil and Ph.D. students:
- No. of Ph. Ds **awarded:** 16
- No. of M. Phil dissertations: 7

- No. of Master's dissertations: 18

SELECTED IMPORTANT SCIENTIFIC CONTRIBUTIONS

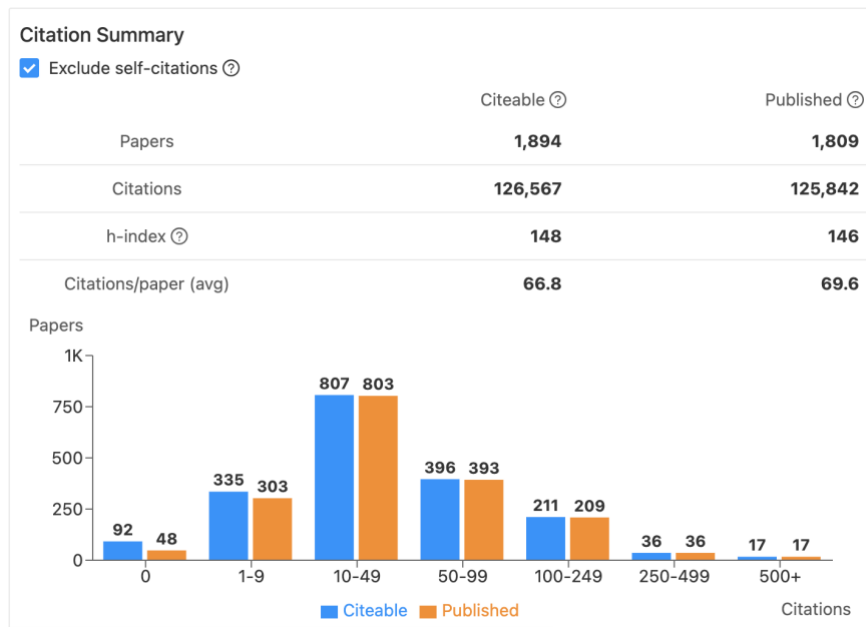
- **Member of the CMS experiment at the CERN-LHC in Geneva Switzerland** which has made the historic **discovery of the Higgs Boson** in 2012 and paved way for the theoreticians to claim **2013- Nobel Prize in Physics**. **The Nobel Citation endorses the contributions of the CMS experiment.**
- **One of the authors of the Higgs Discovery Paper** which is the most cited paper of CMS collaboration; "*Observation of a new boson at a mass of 125 GeV with the CMS experiment at the LHC*", *Phys. Lett. B. 716 (2012) 30*.
Citations: 14859
- **H-Index: 146**
- Physics analysis in the ZEUS experiment at HERA, Germany: 2007–2014
- Part of the L3 experiment at the LEP which made precision QCD – coupling constant α_s measurements and event shapes, precision measurements of Z-resonance and several other important new measurements: 1990- 2007

FABRICATION/ASSEMBLY OF SCINTILLATOR/SEMICONDUCTOR DETECTORS

- As a part of CMS experiment at CERN, Geneva, Switzerland, participated in building the Outer Hadron Calorimeter (HO). The main part of the detector was fabrication of Tiles of scintillating material embedded with optical fiber, spliced to Wavelength Shifting Fiber and coupling with read out electronics.
- Study of Si-PM from Hamamatsu by using a Test Stand at CERN.

PUBLICATIONS As on September 2026

- Total Number of publications: 1809
 These can be found on inspire.net under "find author Kaur, M."
<https://inspirehep.net/authors/1003424?ui-citation-summary=true>



	<u>Citeable</u>	<u>Published</u>
Papers	1894	1809
Total Citations	126,587	125,842

BOOKS EDITED

- **Chief Editor:** Monthly Physics Bulletin of Indian Association of Physics Teachers, India (IAPT); with 8000 copies of this journal, published monthly.
- **Proceedings** of the XIII DAE Symposium on High Energy Physics, 1998.
- **India-CMS News Letter**, Vol. 1, 2015.

INTERNATIONAL ASSIGNMENTS

- Visiting Professor, Department of Physics, University of Windsor, Canada, Aug. 2010 to June, 2011.
- Invited as visiting Professor Department of Physics, University of Windsor, Canada 2012 for one year but could not go due to obligations with the CMS experiment.
- Visiting Researcher, ZEUS Experiment at the Electron-Proton Accelerator DESY (HERA), Max Planck Institute, Munich, Germany January 2007 -2014.
- Visiting Researcher, Stony Brook University, USA, 2005
- European Center for Research in Particle and Nuclear Physics (CERN), Geneva, Switzerland, 1999 – 2020.
On the average **worked 3-4 months every year**, at CERN for R & D work and physics studies on the CMS Experiment at LHC.
- Scientific Associate in L3 experiment at CERN, Geneva, Switzerland, 1992-1995
- Scientific Associate of World Laboratory, FBLJA project at LEP, CERN, Geneva, Switzerland, 1989 -1992.
- Visiting Researcher, University of Birmingham, Birmingham, UK, 1988.
- Visiting Researcher, Max Planck Institute of Physics and Astrophysics, Munich, Germany, 1988.

INTERNATIONAL CONFERENCES ATTENDED

- 9th International Workshop on Multiple Partonic at the LHC. **Simla, India**, December 11-15 2017.
- International School of Subnuclear physics, EMFCSE, **Erice, Italy**, Invited Scientist, June 14 – 23, 2016.
- International School of Subnuclear physics, EMFCSE, **Erice, Italy**, Invited Scientist, June 24 – July 3, 2015.
- XXV International Symposium on Lepton Photon Interactions at High Energies, TIFR, **Mumbai, India**. 22 - 27 August , 2011.
- HCP Symposium, University of Toronto, **Toronto, Canada**. 23-27 August , 2010.
- DIS 2008, XVI International Workshop on Deep-Inelastic Scattering and Related Subjects, University College **London, U.K.** 7-11 April 2008.
- RINGBERG Workshop on non-perturbative QCD of jets, **Munich, Germany**. January 8-10, 2007
- International School of Sub-nuclear Physics held at EMFCSC, **Erice, Italy**. Invited Scientist August 29 – September 7, 2006,
- XXVI International conference on Physics in Collision, DESY, **Zeuthen, Germany**. 26-28 June, 2003,
- XIII Topical Conference on Hadron Collider Physics, February, 1999, **Mumbai, India**
- XXVIII International Conference on High Energy Physics, **Warsaw, Poland**. 25-31 July, 1996.
- Italian Physical Society, HEP Conference, **La Aquila Italy** , 1991.

- XIII International conference on Physics in Collision, **Colmar, France**.
20-22 Jun 1991.
- XXIV International Conference of High Energy Physics, **Munich, Germany**.
4-10 August, 1988.

NATIONAL CONFERENCES ORGANISED

- 7th National Student Symposium of Physics (NSSP2019) sponsored by IAPT Panjab University, Chandigarh, India 3-5 October, 2019. (Chairman).
- 6th National Student Symposium of Physics (NSSP2018) sponsored by IAPT, Panjab University, Chandigarh, India 4-6 October, 2018. (Chairman).
- 5th National Student Symposium of Physics (NSSP2017) sponsored by IAPT, Panjab University, Chandigarh, India 10-12 November, 2017. (Chairman).
- 4th National Student Symposium of Physics (NSSP2016) sponsored by IAPT, Panjab University, Chandigarh, India (Chairman).
- 3rd National Student Symposium of Physics (NSSP2015) sponsored by IAPT, India (Chairman)
- 2nd National Student Symposium (NSSP2014) sponsored by IAPT, India (Convener)
- 1st National Student Symposium (NSSP2013) sponsored by IAPT, India (Convener)
- Workshop on contemporary trends in High Energy Physics and instrumentation, P.U. 10-11 March, 2014. (Convener)
- 13th DAE symposium held at Panjab University, Chandigarh, 1998 (Organising Secretary)

TECHNICAL SKILLS

- High Energy Physics (Experiment) and Statistical analysis
- **Computing Languages:** C++; FORTRAN, PYTHON
- **Operating Systems:** Linux, Windows
- **Tools:** ROOT and Monte Carlo simulations, Familiarity with Data Basis.
- Latex, Revtex
- Microsoft Office
- Simulations

TEACHING DOSSIER

- **1st year, 2nd year University:** Modern Physics, Electricity and Magnetism, AC/DC circuits, special relativity, Thermodynamics and statistical physics, Waves and oscillations, Geometrical Optics, Mechanics.
- **M.Sc. 1st and 2nd years:** Statistical Mechanics, Classical Mechanics, Particle Physics, Computational techniques, Experimental Techniques, Lab. training in Experiments in High Energy Physics.

OUTREACH ACTIVITIES

- Delivered first WISE lecture of Panjab University, February, 2020. Women in Science Education (WISE) is a forum recently started by the university.
- Delivering public lectures and invited talks to students in various institutions
- Writing scientific articles for newspapers on the role of HEP
- Organizing annual National Student Symposium of Physics (NSSP) for Master students to motivate them to undertake research in Physics. 2014 - 2019

- **Editor for Physics Bulletin of IAPT**, a monthly journal which publishes articles on new developments in Physics and the reports of innovations in the field. 8000 copies of the Bulletin are published and distributed every month. 2015- present
- **Life Member:** Indian Physics Association (IPA)
- **Life Member:** Indian Association of Physics Teachers (IAPT)

SKILL SUMMARY

- Participation in detector development for high energy physics experiments.
- Expertise in data analysis techniques and simulation used in particle physics.
- Participation in data collection and shift-taking at CERN in L3 and CMS experiments.
- Mentoring undergraduate and graduate students and supervising the thesis work.
- Preparing and defending Research Proposals.
- Writing research papers and preparing reports and disseminating results as articles in peer-reviewed scientific journals. Presentations at national and international conferences and workshops.
- Teaching courses to Master classes, undergraduate students and handling experiments.
- Tutorials and seminars.
- Organising conferences, workshops and Schools.

I superannuated in 2019. Since then I am devoting all the time to research. Currently I am mentoring 1 Ph.D. student and 5 Master Students' research projects from Brandeis University, US, IIT-Kharagpur, IISER, Pune and CERN.

LIST OF PUBLICATIONS (Reverse Chronological Order)

Following publications represent the work done independently.

1. Siddharth Narayan Singh, R. Aggarwal and **M. Kaur**. Study of quark and gluon jet identification in photoproduction at the EIC. **Phys. Rev. D** **114**, 036009 (2026)
<https://journals.aps.org/prd/pdf/10.1103/v28z-qw9b>
2. Philip Mathew, R. Aggarwal and **M. Kaur**. Event shapes and inclusive hadron spectra at FCC-ee energies. **Phys. Rev. D** **113**, 116017 (2026).
<https://journals.aps.org/prd/abstract/10.1103/243z-g9x8>
3. Stefan Gieseke, Maximilian Horzela, **Manjit Kaur**, Dari Leonardi, Klaus Rabbertz, Aayushi Singla and Cedric Verstege Nonperturbative effects in triple-differential dijet and Z+jet production at the LHC. **SciPost Phys.** **21**, 033 (2026).
<https://scipost.org/SciPostPhys.21.2.033>
4. Jinu James, R. Aggarwal and **M. Kaur** (2024). Comparative analysis of C moments using different phenomenological models. **Phys. Rev. D** **110**, 096014.
<https://journals.aps.org/prd/abstract/10.1103/PhysRevD.110.096014>
5. Soumya Sarkar, R. Aggarwal and **M. Kaur**. Search for nonextensivity in electron-proton interactions at $\sqrt{s} = 300\text{GeV}$. **Phys. Rev. D** **109**, 052008 (2024).
<https://journals.aps.org/prd/abstract/10.1103/PhysRevD.109.052008>
6. Statistical analysis of neutrino-induced hadron production from a different perspective. Rashmi Sharma, R. Aggarwal and **M. Kaur**. **Phys. Rev. D** **108**, 113011 (2023).
<https://journals.aps.org/prd/abstract/10.1103/PhysRevD.108.113011>

7. Jet substructure in neutral current deep inelastic e^+p scattering at the upcoming Electron-Ion Collider. Siddharth Jain, R. Aggarwal and M. Kaur. PHYSICAL REVIEW D 107, 116002 (2023) <https://journals.aps.org/prd/abstract/10.1103/PhysRevD.107.116002>
8. Dual parton model for the charged multiplicity in $p-p$ collisions at 13, 13.6 TeV and for a future LHC energy of 27 TeV. Pranay K. Damuka, R. Aggarwal and M. Kaur. PHYSICAL REVIEW D 106, 076017 (2022). <https://journals.aps.org/prd/abstract/10.1103/PhysRevD.106.076017>
9. Charged particle production in pp collisions at $\sqrt{s} = 8, 7$ and 2.76 TeV at the LHC – a case study. R. Aggarwal and **M. Kaur** Int. J. Mod. Phys. E30, (2021) no.01 2150005. <https://dx.doi.org/10.1142/S0218301321500051>
10. EFT validity issues in Vector Boson Scattering processes. By Michal Szleper, Geetanjali Chaudhary, Jan Kalinowski, **Manjit Kaur**, Pawel Kozow, Stefan Pokorski, Kaur Sandeep, Slawomir Tkaczyk.. PoS LHCP2020 (2021) 023. <https://doi.org/10.22323/1.382.0023>
11. Investigation of particle production in $h-A$ collisions using statistical distributions. By A. Kaur, **M. Kaur**, R. Aggarwal. Int. J. Mod. Phys. E30 (2021) no.02, 2150007. <https://doi.org/10.1142/S0218301321500075>
12. Multiplicity moments using Tsallis statistics in high-energy hadron–nucleus interactions. By S. Sharma, G. Chaudhary, K. Sandeep, A. Singla, **M. Kaur**. Int. J. Mod.Phys. E29 (2020) no.04, 2050021. <https://www.worldscientific.com/doi/abs/10.1142/S0218301320500214>
13. Comparative study of charged multiplicities and moments in pp collisions at $\sqrt{s} = 7$ TeV in the forward region at the LHC. By R. Aggarwal, **M. Kaur**. Phys. Rev. D102 (2020) no.5, 054005. <https://journals.aps.org/prd/abstract/10.1103/PhysRevD.102.054005>
14. Charged-Particle Multiplicity Moments as Described by Shifted Gompertz Distribution in e^+e^- , $p\bar{p}$ and pp Collisions at High Energies. By Aayushi Singla, **M. Kaur**. Adv. High Energy Phys. 2020 (2020) 5192193. <https://doi.org/10.1155/2020/5192193>
15. Compelling evidence of oscillatory behaviour of hadronic multiplicities in the shifted Gompertz distribution. By R. Aggarwal, **M. Kaur**. Adv. High Energy Phys. 2020 (2020) 5464682. <https://doi.org/10.1155/2020/5464682>
16. EFT triangles in the same-sign WW scattering process at the HL-LHC and HE-LHC By Geetanjali Chaudhary, Jan Kalinowski, **Manjit Kaur**, Paweł Kozów, Kaur Sandeep, Michał Szleper, Sławomir Tkaczyk. Eur. Phys. J. C80 (2020) no.3, 181. <https://doi.org/10.1140/epjc/s10052-020-7728-x>
17. Some Compelling Overview of Charged Particle Multiplicity Distribution in pp Collisions at the LHC. Ritu Aggarwal, **Manjit Kaur**. Workshop on Frontiers in High Energy Physics 2019. Springer Proceedings in Physics, vol 248. Springer, Singapore. https://doi.org/10.1007/978-981-15-6292-1_25.
18. Moments of multiplicity distributions using Tsallis statistics in leptonic and hadronic collisions By S. Sharma, **M. Kaur**. Phys. Rev. D99 (2019) no.9, 096016. <https://journals.aps.org/prd/abstract/10.1103/PhysRevD.99.096016>
19. Report from Working Group 2 : Higgs Physics at the HL-LHC and HE-LHC By M. Cepeda, **M. Kaur** et al.. CERN Yellow Rep. Monogram. 7 (2019) 221-584.
20. Multiplicity spectra in e^+e^- and $p\bar{p}$ collisions in terms of Tsallis and Weibull distributions. By S. Sharma, **M. Kaur**, S. Thakur. Int. J. Mod. Phys. E27 (2019) no.11, 1850101. <https://doi.org/10.1142/S021830131850101X>
21. Statistical Hadronisation in High Energy Particle Collisions. By S. Sharma, S. Thakur, M. Kaur. Springer Proc. Phys. 203 (2018) 771-773. <https://doi.org/10.1142/S021830131850101X>

22. Multiplicity spectra in pp collisions at high energies in terms of Gamma and Tsallis distributions
By S. Sharma, **M. Kaur**. Phys. Rev. D98 (2018) no.3, 034008.
<https://doi.org/10.1103/PhysRevD.98.034008>
23. A new distribution for multiplicities in leptonic and hadronic collisions at high energies
By R. Chawla, **M. Kaur**. Adv. High Energy Phys. 2018 (2018) 5129341.
<https://doi.org/10.1155/2018/5129341>
24. Modified Tsallis and Weibull distributions for multiplicities in e+e- collisions. By S. Sharma, **M. Kaur**, S. Thakur. Phys. Rev. D95 (2017) no.11, 114002.
<https://doi.org/10.1103/PhysRevD.95.114002>
25. Statistical hadronization and multiplicities in high-energy hadron–nucleus collisions
By S. Sharma, **M. Kaur**, S. Thakur. Int. J. Mod. Phys. E26 (2017) no.03, 1750006.
<https://doi.org/10.1142/S0218301317500069>
26. Tsallis nonextensive entropy and the multiplicity distributions in high energy leptonic collisions
By S. Sharma, **M. Kaur**, Sandeep Kaur. Int. J. Mod. Phys. E25 (2016) no.06, 1650041.
<https://doi.org/10.1142/S0218301316500415>
27. Measurement of ϕ^* Variable in Drell-Yan Events in p-p Collisions Using CMS Detector at LHC
By G. Walia, **M. Kaur**, K. Mazumdar, M. Guchait, R. Chatterjee.
Springer Proc. Phys. 174 (2016) 591-595.
28. Subjet Multiplicities at LHC Energies and the QCD Color Factor Ratio C_A/C_F .
By **M. Kaur**, Anur P. Kaur. Adv. High Energy Phys. 2013 (2013) 585809.
<http://dx.doi.org/10.1155/2013/585809>
29. Analysis of multiplicities in e+ e- interactions using 2-jet rates from different jet algorithms
By S. Dahiya, **M. Kaur**, S. Dhamija. J. Phys. G28 (2002) 2169-2178. Online at
stacks.iop.org/JPhysG/28/2169
30. Inclusive studies of pion nucleus interactions in the framework of the Lund fragmentation model
By S. Dhamija, **M. Kaur**, S. Dahiya., J. Phys. G28 (2002) 1239-1250. Online at
stacks.iop.org/JPhysG/28/1239
31. Bunching parameter analysis and multifractal multiplicity distributions in hadron hadron and hadron nucleus interactions. By S. Dahiya, **M. Kaur**, S. Dhamija. J. Phys. G28 (2002) 321-331. Online at stacks.iop.org/JPhysG/28/321
32. Analysis of pion nucleus interactions in the framework of a multistring model.
By S. Dhamija, **M. Kaur**, S. Dahiya. Can. J. Phys. 80 (2002) 1571-1578. DOI: [10.1139/P02-074](https://doi.org/10.1139/P02-074)
33. Analysis of hadron nucleus interactions in the framework of two multistring models
By S. Dhamija, **M. Kaur**, S. Dahiya. Phys. Rev. C63 (2001) 035201.
DOI: [10.1103/PhysRevC.63.035201](https://doi.org/10.1103/PhysRevC.63.035201)
34. High-energy physics. Proceedings, 13th DAE Symposium, Chandigarh, India, December 26-30, 1998
By J.M. Kohli, **M. Kaur**. Pramana 54 (2000) pp.453-683. <https://inspirehep.net/literature/529684>
35. Multifractal multiplicity distribution in e+ e- and anti-p p interactions from nonlinear Markov process. By S. Dahiya, **M. Kaur**. J. Phys. G24 (1998) 2027-2035.) [PII: S0954-3899\(98\)95035-6](https://doi.org/10.1088/0954-3899(98)95035-6)
36. Multifractal multiplicity distribution in e+ e- and anti-p p interactions from nonlinear Markov process. By S. Dahiya, **M. Kaur**. J. Phys. G24 (1998) 2027-2035.
37. Scaling in multiplicity distribution and the leading particle effect
By **M. Kaur**, J.D. Swain. Proceedings Physics in Collision (1996) Vol.2, p596

38. Investigation Of R Anti-neutrino Relationship In Hadron Nucleus Collisions At High-energies
By M.M. Aggarwal, **M. Kaur**, V.S. Bhatia, I.S. Mittra., Phys. Scripta 39 (1989) 47-49.
39. Multiple Production In Pion Nucleus Interactions In The Additive Quark Model
By **M. Kaur**, J.M. Kohli, V.S. Bhatia, I.S. Mittra. Nucl. Phys. A477 (1988) 609-620.
40. Test Of A Model Of Hadron Nucleus Interactions At High-energies
By **M. Kaur**., Can. J. Phys. 64 (1986) 338-340. 1659.
41. Comparative Study Of Momentum And Rapidity Spectra Of Pions Produced In Hadron Nucleon
And Hadron Nucleus Collisions By **M. Kaur**, J.M. Kohli. Can. J. Phys. 60 (1982) 802-804
42. Transverse Momentum Characteristics Of 50-gev/c Pi- Nucleus Collisions In A Pulsed Magnetic
Field. By **M. Kaur**, J.M. Kohli. Phys. Scripta 25 (1982) 595-598.
43. A Study Of Some Characteristics Of 50-GeV/c Pi- Em Interactions Exposed In A Magnetic Field.
By **M. Kaur**, J.M. Kohli. Phys. Scripta 22 (1981) 562.
44. Rapidity Distributions And Cluster Formation In 50-GeV/c Pi- Nucleus Interactions In A Pulsed
Magnetic Field. By M. Kaur, J.M. Kohli. Phys. Scripta 23 (1981) 272-276.
45. Universal Multiplicity Hypothesis of QCD. By M. **Kaur**, J.M. Kohli. Nuovo Cim. A47 (1978)
200-209.
46. Study of Charged Particle Multiplicity in 50-GeV/c pi- Emulsion Interaction. By V. Kumar, A.P.
Sharma, **M. Kaur**, J.M. Kohli, I.S. Mittra, P.M. Sood. Phys. Soc. Jap. 44 (1978) 1078-1082.
47. Scaling in Multiplicity Distribution in High-Energy p Emulsion and pi- Emulsion Collisions
By **M. Kaur**, J.M. Kohli, V. Kumar, A.P. Sharma. Nuovo Cim. A45 (1978) 161-170.

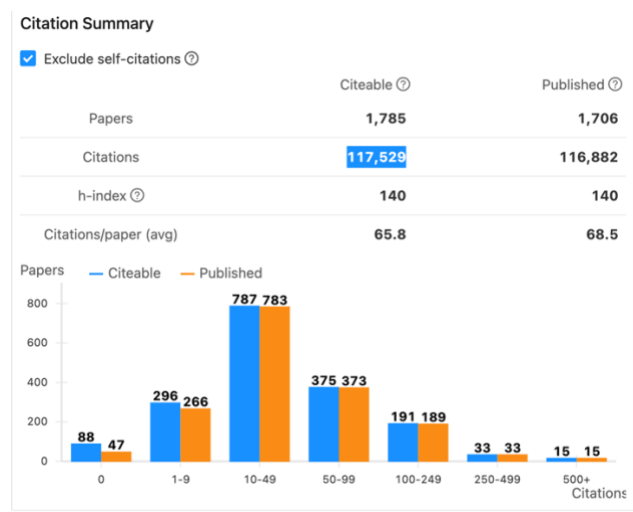
FEW IMPORTANT PUBLICATIONS WITH SIGNIFICANT CONTRIBUTIONS **(L3/CMS/ZEUS/EMU01 COLLABORATIONS)**

48. Dependence of inclusive jet production on the anti- k_T distance parameter in pp collisions at $\sqrt{s} = 13$ TeV. CMS Collaboration (Albert M Sirunyan et al). JHEP 12 (2020) 082.
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