



intro

by Suresh Chand

Submission date: 23-Feb-2026 11:42AM (UTC+0530)

Submission ID: 2886155970

File name: introSuresh.pdf (2.59M)

Word count: 19523

Character count: 99611

ORIGINALITY REPORT

23%

SIMILARITY INDEX

17%

INTERNET SOURCES

21%

PUBLICATIONS

3%

STUDENT PAPERS

PRIMARY SOURCES

1

scipost.org

Internet Source

4%

2

arxiv.org

Internet Source

2%

3

vdoc.pub

Internet Source

2%

4

Zhi-Zhong Xing, Shun Zhou. "Neutrinos in Particle Physics, Astronomy and Cosmology", Springer Nature, 2011

Publication

1%

5

Marco Cirelli, Alessandro Strumia, Jure Zupan. "Dark matter", SciPost Physics Reviews, 2026

Publication

<1%

6

Shaaban Khalil. "Beyond the Standard Model of Particle Physics - Advanced Theories in Particle Physics", CRC Press, 2026

Publication

<1%

7

M. Tanabashi, K. Hagiwara, K. Hikasa, K. Nakamura et al. "Review of Particle Physics", Physical Review D, 2018

Publication

<1%

8

Extragalactic Astronomy and Cosmology, 2015.

Publication

<1%

9

theses.hal.science

Internet Source

<1%

10	Utpal Sarkar. "Particle and Astroparticle Physics", CRC Press, 2019 Publication	<1 %
11	Bing-Lin Young. "A survey of dark matter and related topics in cosmology", Frontiers of Physics, 2016 Publication	<1 %
12	amsdottorato.unibo.it Internet Source	<1 %
13	Submitted to Indian Institute of Technology Guwahati Student Paper	<1 %
14	J Aalbers, S S AbdusSalam, K Abe, V Aerne et al. "A next-generation liquid xenon observatory for dark matter and neutrino physics", Journal of Physics G: Nuclear and Particle Physics, 2022 Publication	<1 %
15	www.prl.res.in Internet Source	<1 %
16	Zhi-Zhong Xing, Shun Zhou. "Chapter 11 Cosmological Matter-antimatter Asymmetry", Springer Science and Business Media LLC, 2011 Publication	<1 %
17	deepfly.org Internet Source	<1 %
18	W Buchmüller. "Some aspects of thermal leptogenesis", New Journal of Physics, 08/11/2004 Publication	<1 %
19	Lawrence J. Hall, Karsten Jedamzik, John March-Russell, Stephen M. West. "Freeze-in Similarity Report-TH-4044_176121102	<1 %

production of FIMP dark matter", Journal of
High Energy Physics, 2010

Publication

20	spectrum.library.concordia.ca Internet Source	<1 %
21	Ralegankar, Pranjali. "Probing Hidden Sectors with Early Universe Cosmology", University of Illinois at Urbana-Champaign Publication	<1 %
22	"Reviews in Modern Astronomy", Wiley, 2008 Publication	<1 %
23	Chen, Mu-Chun. "Leptogenesis", Colliders and Neutrinos - The Window into Physics beyond the Standard Model (TASI 2006), 2008. Publication	<1 %
24	ia800406.us.archive.org Internet Source	<1 %
25	123dok.net Internet Source	<1 %
26	Submitted to Indian Institute of Science, Bangalore Student Paper	<1 %
27	Submitted to University of Durham Student Paper	<1 %
28	Mainak Chakraborty, R. Krishnan, Ambar Ghosal. "Predictive S4 flavon model with TM1 mixing and baryogenesis through leptogenesis", Journal of High Energy Physics, 2020 Publication	<1 %
29	export.arxiv.org Internet Source	<1 %

30 Schramm, D. N.. "Astrophysical and cosmological constraints to neutrino properties", The Big Bang and other Explosions in Nuclear and Particle Astrophysics, 1996. $<1\%$
Publication

31 XinXin Qi, Hao Sun. " Nonthermal dark matter production and leptogenesis in a model ", Physical Review D, 2025 $<1\%$
Publication

32 sfera.unife.it $<1\%$
Internet Source

33 Astronomy and Astrophysics Library, 1998. $<1\%$
Publication

34 hdl.handle.net $<1\%$
Internet Source

35 pdffox.com $<1\%$
Internet Source

36 Buchmuller, W.. "Leptogenesis for pedestrians", Annals of Physics, 200502 $<1\%$
Publication

37 Keisuke Harigaya, Masahiro Ibe, Tsutomu T. Yanagida. "Seesaw mechanism with Occam's razor", Physical Review D, 2012 $<1\%$
Publication

38 docslib.org $<1\%$
Internet Source

39 www.scribd.com $<1\%$
Internet Source

40 123dok.org $<1\%$
Internet Source

41 d-nb.info
S41 Clarity Report-TH-4044_176121102
Internet Source

<1 %

42

Suresh Chand, Mariana Frank, Poulose Poulose. "Leptogenesis from a feebly interacting dark matter sector", Physical Review D, 2022

Publication

<1 %

43

core.ac.uk

Internet Source

<1 %

44

dipot.ulb.ac.be

Internet Source

<1 %

45

www.hri.res.in

Internet Source

<1 %

46

Zema, Vanessa. "Unveiling the Nature of Dark Matter with Direct Detection Experiments.", Chalmers Tekniska Hogskola (Sweden), 2020

Publication

<1 %

47

Submitted to King's College

Student Paper

<1 %

48

www.arxiv-vanity.com

Internet Source

<1 %

49

"Particle Physics Reference Library", Springer Science and Business Media LLC, 2020

Publication

<1 %

50

S.F King. "Leptogenesis in the exceptional supersymmetric standard model: flavour dependent lepton asymmetries", Journal of High Energy Physics, 12/11/2008

Publication

<1 %

51

Submitted to University of Iowa

Student Paper

<1 %

52

in2p3.hal.science

Similarity Report TH-4044_176121102

<1 %

53	Baules, Victor. "Classically Conformal Hidden U(1) Extended Standard Model and SYMBA: Benchmarking Symbolic Calculation of Standard Model Squared Amplitudes With Transformer Language Models.", The University of Alabama Publication	<1 %
54	Hussain, Usama. "Measurements of ZZ Production Cross Section Using Four-Lepton Events and Constraints on Anomalous Triple Gauge Couplings at $\sqrt{s} = 13$ TeV Using the CMS Detector at the CERN LHC.", The University of Wisconsin - Madison, 2020 Publication	<1 %
55	Reynolds, Tyler. "A Measurement of the Ionization Yield at Sub-keV Recoil Energies in Silicon", University of Florida, 2022 Publication	<1 %
56	etheses.bham.ac.uk Internet Source	<1 %
57	uh-ir.tdl.org Internet Source	<1 %
58	Lungu, Marius. "Exploring the Universe with the Atacama Cosmology Telescope: Polarization-Sensitive Measurements of the Cosmic Microwave Background.", University of Pennsylvania, 2018 Publication	<1 %
59	Ota, Naomi. "X-ray spectroscopy of clusters of galaxies", Research in Astronomy and Astrophysics, 2012. Publication	<1 %
60	Subhendra Mohanty. "Astroparticle Physics and Cosmology". Springer Science and	<1 %

61 Techniques and Concepts of High Energy Physics X, 1999. <1 %

Publication

62 Zhi-zhong Xing. "Flavor structures of charged fermions and massive neutrinos", Physics Reports, 2020 <1 %

Publication

63 astroparticulas.fisica.edu.uy <1 %

Internet Source

64 docksci.com <1 %

Internet Source

65 ebin.pub <1 %

Internet Source

66 inspirehep.net <1 %

Internet Source

67 Francesco D'Eramo, Jesse Thaler. "Semi-annihilation of dark matter", Journal of High Energy Physics, 2010 <1 %

Publication

68 Jungman, G.. "Supersymmetric dark matter", Physics Reports, 199603 <1 %

Publication

69 Kaladharan, Ajay. "From Colliders to Cosmos: Investigating Thermal History and Baryon Asymmetry of the Universe.", Oklahoma State University <1 %

Publication

70 M. Miskaoui, M. A. Loualidi. "Leptogenesis, fermion masses and mixings in a SUSY SU(5) GUT with D4 flavor symmetry", Journal of High Energy Physics, 2021 <1 %

Publication

71 Mahmud, Shameran. "Effective Field Theories and Vector Boson Scattering to Probe for New Physics in the Higgs Sector", The Florida State University, 2025

Publication

<1 %

72 Masaaki Fujii, T Yanagida. "Natural gravitino dark matter and thermal leptogenesis in gauge-mediated supersymmetry-breaking models", Physics Letters B, 2002

Publication

<1 %

73 P A Zyla, R M Barnett, J Beringer, O Dahl et al. "Review of Particle Physics", Progress of Theoretical and Experimental Physics, 2020

Publication

<1 %

74 Particle Physics Ideas and Recent Developments, 2000.

Publication

<1 %

75 Sreerupa Chongdar, Sasmita Mishra. "Baryogenesis via flavoured leptogenesis in a minimal type-II seesaw model", Nuclear Physics B, 2024

Publication

<1 %

76 kb.osu.edu

Internet Source

<1 %

77 Bailey, Catherine Noel. "The cryogenic dark matter search: First 5-tower data and improved understanding of ionization collection", Proquest, 20111108

Publication

<1 %

78 Submitted to Barry Goldwater High School

Student Paper

<1 %

79 Chandan Hati, Sudhanwa Patra, Prativa Pritimita, Utpal Sarkar. "Neutrino Masses and Similarity Report-TH-4044_176121102

<1 %

Leptogenesis in Left-Right Symmetric Models:
A Review From a Model Building Perspective",
Frontiers in Physics, 2018

Publication

80

Chung, D.J.H.. "The soft supersymmetry-breaking Lagrangian: theory and applications", Physics Reports, 200502

Publication

<1 %

81

He, X.G.. "Interactions of a neutrino with an extremely light scalar", Physics Letters B, 19981217

Publication

<1 %

82

Submitted to Tezpur University - CN-173457

Student Paper

<1 %

83

Vivek Banerjee, Sasmita Mishra. "Interplay of type-I and type-II seesaw in neutrinoless double beta decay in left-right symmetric model", Nuclear Physics B, 2024

Publication

<1 %

84

David N. Schramm. "Big-bang nucleosynthesis enters the precision era", Reviews of Modern Physics, 01/1998

Publication

<1 %

85

Tsai, Meng-Ju. "Studies of Four-Top-Quark Production in Proton-Proton Collisions at the LHC With the Same-Sign Dilepton and Multilepton Final States", University of Michigan, 2024

Publication

<1 %

86

www.opticalmechanics.com

Internet Source

<1 %

87

Antusch, S.. "Type II leptogenesis and the neutrino mass scale", Physics Letters B, 20040909

Publication

<1 %

88 Bikash Thapa, Ng. K. Francis. "Resonant leptogenesis and TM_{14} mixing in minimal type-I seesaw model with S_4 symmetry", The European Physical Journal C, 2021
Publication

89 Burrows, T.J.. "Family symmetries with extra dimensions", 2011
Internet Source

90 Jana, Sudip. "Neutrino and Higgs Physics: Road-map to Discovery for New Physics Beyond The Standard Model", Oklahoma State University, 2020
Publication

91 Mike Guidry. "Gauge Field Theories", Wiley, 1991
Publication

92 Oliver-Mallory, Kelsey Colleen. "Backgrounds in LUX and LZ: Extending the Sensitivity of LUX to Low-Mass Dark Matter", University of California, Berkeley, 2023
Publication

93 Submitted to University of Adelaide
Student Paper

94 Submitted to University of Liverpool
Student Paper

95 Submitted to University of Sheffield
Student Paper

96 Yi Liao, Xiao-Dong Ma, Hao-Lin Wang, Xiang Zhao. "RGE solver for the complete dim-7 SMEFT interactions and its application to $0\nu\beta\beta$ decay", Journal of High Energy Physics, 2025
Publication

97	www.osti.gov Internet Source	<1 %
98	Submitted to Australian National University Student Paper	<1 %
99	Benjamin Wallisch. "Cosmological Probes of Light Relics", Springer Science and Business Media LLC, 2019 Publication	<1 %
100	Davidson, S.. "Leptogenesis", Physics Reports, 200809 Publication	<1 %
101	Submitted to Nanyang Technological University Student Paper	<1 %
102	Watson, James Reed. "High Voltage Considerations for Dark Matter Searches", University of California, Berkeley, 2024 Publication	<1 %
103	ia800909.us.archive.org Internet Source	<1 %
104	iktp.tu-dresden.de Internet Source	<1 %
105	Masaaki Fujii, K. Hamaguchi. "Nonthermal dark matter via Affleck-Dine baryogenesis and its detection possibility", Physical Review D, 2002 Publication	<1 %
106	Michael Dine. "Low energy supersymmetry from the landscape", Journal of High Energy Physics, 08/28/2008 Publication	<1 %
107	Teruyuki Kitabayashi. "Primordial black holes and axion-like particles", International Journal of Modern Physics D, 2017 Publication	<1 %

-
- 108** William. T. Emond, Peter Millington, Paul M. Saffin. "Boltzmann equations for preheating", Journal of Cosmology and Astroparticle Physics, 2018
Publication $<1\%$
-
- 109** Yann Gouttenoire. "Chapter 3 Standard Model of Cosmology", Springer Science and Business Media LLC, 2022
Publication $<1\%$
-
- 110** d-scholarship.pitt.edu
Internet Source $<1\%$
-
- 111** eprints.nottingham.ac.uk
Internet Source $<1\%$
-
- 112** Abada, A.. "Leptogenesis with four gauge singlets", Nuclear Physics, Section B, 20031124
Publication $<1\%$
-
- 113** Anirban Biswas, Debasish Borah, Dibyendu Nanda. "When freeze-out precedes freeze-in: sub-TeV fermion triplet dark matter with radiative neutrino mass", Journal of Cosmology and Astroparticle Physics, 2018
Publication $<1\%$
-
- 114** Fredrik Björkeröth, Ivo de Medeiros Varzielas, M. L. López-Ibáñez, Aurora Melis, Óscar Vives. "Leptogenesis in $\Delta(27)$ with a universal texture zero", Journal of High Energy Physics, 2019
Publication $<1\%$
-
- 115** Submitted to KTH - The Royal Institute of Technology
Student Paper $<1\%$
-

116 Manalaysay, Aaron Gosta. "Response of liquid xenon to low-energy ionizing radiation and its use in the XENON10 dark matter search", Proquest, 20111108 $<1\%$
Publication

117 Noordermeer, E., J. M. Van Der Hulst, R. Sancisi, R. S. Swaters, and T. S. Van Albada. "The mass distribution in early-type disc galaxies: declining rotation curves and correlations with optical properties", Monthly Notices of the Royal Astronomical Society, 2007. $<1\%$
Publication

118 Sullivan, Matthew Kyle. "Phenomenology of Models with New Scalar Particles.", University of Kansas, 2020 $<1\%$
Publication

119 Submitted to Sungkyunkwan University $<1\%$
Student Paper

120 Timoth   Alezraa, Giacomo Cacciapaglia, Aldo Deandrea. "Leptogenesis in five-dimensional asymptotic grand unification models", Journal of High Energy Physics, 2025 $<1\%$
Publication

121 Ze-Peng Liu, Yue-Liang Wu, Yu-Feng Zhou. "Enhancement of dark matter relic density from late time dark matter conversions", The European Physical Journal C, 2011 $<1\%$
Publication

122 Zhi-zhong Xing, Zhen-hua Zhao. "The minimal seesaw and leptogenesis models", Reports on Progress in Physics, 2021 $<1\%$
Publication

<1 %

124

hal.archives-ouvertes.fr

Internet Source

<1 %

125

pure.mpg.de

Internet Source

<1 %

126

tud.qucosa.de

Internet Source

<1 %

Exclude quotes On

Exclude matches < 10 words

Exclude bibliography On