

Curriculum Vitae

Anjan Ananda Sen

DATE OF BIRTH

May 17, 1971

MARITAL STATUS

Married

NATIONALITY

Indian

ADDRESS FOR CORRESPONDENCE

Centre For Theoretical Physics,
Jamia Millia Islamia,
Jamia Nagar, New Delhi 110025
Delhi, India,

E-mail: aasen@jmi.ac.in

ACADEMIC QUALIFICATION

Phd in Science from Jadavpur University, Kolkata, India. Degree obtained in 1999 under the supervision of Prof. Asit Banerjee and Prof. Narayan Banerjee. The thesis title is “Some Aspects of Early Universe”.

RESEARCH FIELD

Gravitation, Astroparticle Physics and Cosmology.

CURRENT POSITION

Professor at the Center For Theoretical Physics, in Jamia Millia Islamia Central University, New Delhi, India.

ACADEMIC EXPERIENCE

- **Professor** at **Center For Theoretical Physics at Jamia Millia Islamia**, New Delhi, India from February 2013.
- **Professor** at the School of Arts and Sciences, Ahmedabad University, Gujarat, India from December 2020 till June 2022 (On Leave from Jamia Millia Islamia during this period)
- **Associate Professor** at **Center For Theoretical Physics at Jamia Millia Islamia**, New Delhi, India from February 2010 till February 2013.
- **Reader** at **Center For Theoretical Physics at Jamia Millia Islamia**, New Delhi, India from February 2007 till February 2010.
- **Post Doctoral Fellow** in the **Department of Physics and Astronomy, Vanderbilt University**, in U.S.A from December 2004 to February 2007.
- **Post Doctoral Fellow, Instituto Superior Tecnico** in Lisbon, Portugal November 2001 to August 2004.
- **Post Doctoral Fellow** at **Harish-Chandra Research Institute** in Allahabad, India from November 1999 to November 2001.

Research Publications

(Source: <https://inspirehep.net/authors/989342?ui-citation-summary=true>)

Total Number of Publications: 112

Average Citation per Paper: 72

h-index: 40

RESEARCH GRANTS

- **Principal Investigator**

Type of the Project: National.

Funding Agency: SERC, Dept of Science and Technology, Govt of India

Title: Search for the missing links between observation and theory in beyond concordance Λ CDM model.

Grant Amount: Rs. 43,86,000.00

Status: Completed.

- **Principal Investigator**

Type of the Project: National.

Funding Agency: SERC, Dept of Science and Technology, Govt of India Under Matrix Program

Title: Astrophysics and Cosmology in Ghost-Free Bi-metric Gravity.

Grant Amount: Rs. 6,60,000.00

Status: Completed.

- **Principal Investigator**

Type of the Project: National.

Funding Agency: University Grants Commission, Govt of India

Title: Accelerating Universe and its Observational Signatures.

Grant Amount: Rs.5,50,000.00

Status: Completed

- **Principal Investigator**

Type of the Project: National.

Funding Agency: SERC, Dept of Science and Technology, Govt of India

Title: Astrophysics and Cosmology with Higher Dimensional Theories.

Co-Investigators: Prof. D. Ghoshal, J.N.University, Delhi and Prof. D. Choudhury, University of Delhi, Delhi

Grant Amount:Rs.27,14,000.00

Status: Completed.

- **Co-Investigator**

Funding Agency: C.S.I.R, Govt of India

Type of the Project: National.

Title: Accelerated Expansion of the Universe: Its Origin and Observational Consequences

Principal Investigator: Prof. T.R. Seshadri, University of Delhi, Delhi

Grant: Rs. 16,92,000.00

Status: Completed.

- **Co-Investigator**

Funding Agency: DST, Govt of India

Type of the Project: International, Indo-Russian Project

Title: Inflation and Late Time Acceleration of the Universe and its Observational Signatures

Principal Investigators:

Prof. M. Sami, Centre For Theoretical Physics, J.M.I, Delhi

Prof. A. Kamenshik, Landau Institute of Theoretical Physics, Moscow, Russia
Grant: Rs. 14,70,400.00

Status: Completed.

PARTICIPATION IN BIG PROJECTS

- Member, **International Science Development Team** on "Fundamental Physics and Cosmology" for **Thirty Meter Telescope (TMT) project**.
- Member, **SKA-India Consortium** and **Indian Science Working Group** on "Epoch of Reionization and Cosmology" for **Square Kilometer Array (SKA) project**.
- Member, **SKA-India Science Committee**.
- Associate Member, **SKA Science Working Group on Cosmology**.
- Member, **IndIGO Consortium** (Indian Initiative in Gravitational-Wave Observations).

AWARDS and FELLOWSHIPS

- **Visitor Award 2015** by the Honourable President of India for Best Research.
- **Fellow, National Academy of Sciences, Allahabad, India**
- **Fellow, International Artificial Intelligence Industry Alliance (AIIA)**
- **Research Associateship at Abdus Salam International Center For Theoretical Physics, Trieste, Italy** during 2009-2016.

- **Research Associateship at IUCAA, Pune, India** from 2007-till date.
- **Honorable Mention in the 2003 Essay Contest of the Gravity Research Foundation, US**, for the essay "Generalized Chaplygin Gas Model: Dark Energy - Matter Unification and CMBR Constraints" written with M.C. Bento and O. Bertolami.

PhD Thesis Supervision/Post Doctoral Fellow

- PhD Awarded: 10
- PhD : 01 (ongoing)
- Post Doctoral Fellow under SERB-CRG-Govt of India Project: 02 (completed).
- Post Doctoral Fellow under DS Kothari Scheme of UGC-Govt of India: 01 (completed).
- Post Doctoral Fellow under SERB-NPDF-Govt of India Scheme: 02 (ongoing).

Summer/Masters PROJECT SUPERVISION : 20

ACTIVITIES

- **In-Charge**, Graduate Program, Centre For Theoretical Physics, Jamia Millia Islamia.
- **Member**, Academic Audit Committee, Jamia Millia Islamia.
- **Nodal Coordinator**, for Centre For Theoretical Physics, Internal Quality Assurance Cell (IQAC), Jamia Millia Islamia
- **Secretary, Indian Associate for General Relativity and Gravitation (IAGRG)** from 2022 till 2026..
- **Council Member for Indian Associate for General Relativity and Gravitation (IAGRG)** during 2014-2018.
- **Member, Editorial Board**, Discover Space, Springer Nature
- **Member, NPDF-SRG Expert Committee**, ANRF-SERB, Govt of. India
- **Director**, XXVI SERC Main School On Theoretical High Energy Physics held in Center For Theoretical Physics, Jamia Millia Islamia, New Delhi, India from 31st January to 20th February 2011.

- Refereeing: Physical Review D, Astronomy and Astrophysics, Physics Letters B, JCAP, Europhysics Letters, General Relativity and Gravitation, European Physical Journal C, Physics of the Dark Universe, MNRAS, Astroparticle Physics
- **Convenor, VIII meeting on Field Theoretic Aspects of Gravity** held at H.N.B. Garhwal University, Srinagar, Uttarkhand, India from 19th-23rd April 2010.
- **Coordinator, Cosmology and Astroparticle Physics Working Group, at WHEPP-12** held at Mahabaleswar, India during 2nd-8th January 2012.
- **Member, Syllabus Committee for the M.SC/M.Phil Physics Program**, at Central University of Rajasthan, India.
- **Convenor, S.O.C. for 27th IAGRG Meeting** held at Garhwal University, Srinagar, India during March 7-9, 2013.
- **Member, Organising Committee, IUCAA Sponsored Workshop on Cosmology, entitled "Present Observational Constraints on Cosmological Parameters"** held at University of Delhi, India during 28th January - 1st February 2013.
- **Member, Organising Committee, AAPCOS-2013**, held at Institute for Advanced Studies, Shimla, India during 14-17 June 2013.
- **Member, National Organising Committee (NOC), WHEPP-XIV** held at Indian Institute of Technology, Kanpur, India in 4-13 December 2015.
- **Member, Organising Committee, XXVII IUPAP Conference on Computational Physics** held at Indian Institute of Technology, Guwahati, India in 2-5 December 2015.
- **Co-Chair, Cosmology Session at International Conference on Gravitation and Cosmology (ICGC 2015)** held at Indian Institute of Science Education and Research, Mohali, India during December 2015.
- **Member, National Organising Committee (NOC), SUSY-2017** held at TIFR, India in December 2017.
- **Member, Series Scientific Organising Committee (SSOC), Conference on Shedding Light on the Dark Universe With Extremely Large telescope** to be held in Asia/Australia, Europe/Africa and USA.
- **Member, Local Scientific Organising Committee (LSOC), Conference on Shedding Light on the Dark Universe With Extremely Large telescope** held in Lanzhou, China during Aug 30-Sept 2, 2017.

- **Member, Organising Committee, Conference on Shedding Light on the Dark Universe with Extremely Large Telescopes, to be held at Abdus Salam International Center For Theoretical Physics, Trieste, Italy during 2 Jul - 6 Jul 2018.**
- **Member, SOC, IFPU Workshop on Cosmological Tensions at Trieste, Italy, May 2023.**
- **Chair, SOC, 32nd IAGRG meeting at IISER Kolkata in December 2022.**

TEACHING EXPERIENCE

- **Undergraduate Courses:**
Mechanics, Multivariate Calculus, Electricity and Magnetism, Quantum Mechanics, Advanced Quantum Mechanics.
- **Postgraduate Courses:**
Advanced Electrodynamics, Classical Field Theory, General Theory of Relativity
- **Phd Level Courses:**
Quantum Field Theory, General Theory of Relativity, Cosmology, Group Theory, Statistical Techniques in Physics
- **Guest Lecturer**
General Relativity and Cosmology Course
SERC School on Theoretical High Energy Physics (Preparatory),
Organised by DST, Govt. of India.
S.G.B.T. Khalsa College, Delhi (2008).
- **Lecturer**
Course on Statistical Technique in Physics
SERC School on Theoretical High Energy Physics (Preparatory),
Organised by DST, Govt. of India at North Bengal University, West Bengal in October 2012.
- **Guest Lecturer**
General Relativity and Cosmology Course
SERC School on Theoretical High Energy Physics (Preparatory),
Organised by DST, Govt. of India.
BITS, Pilani, Goa, (2010).
- **Lecturer**
Course on General Relativity and Cosmology
SERC School on Theoretical High Energy Physics (Preparatory),
Organised by SERB, DST, Govt. of India at Indian Institute of Technology, Gandhinagar, Gujrat in September 2016.

- **Lecturer**
 Course on Statistical Technique in Physics
SERC School on Theoretical High Energy Physics (Preparatory),
 Organised by DST, Govt. of India at Hyderabad University, Telengana in
 August 2018.

- **Lecturer**
 Course on Dark Energy
Autumn School on Cosmology
 Organised by BITS, Pilani, Rajasthan, and IUCAA, Pune, India in November
 2013.

- **Lecturer**
 Course on Statistical Techniques in Physics
UGC-Refresher Course, March-2014
 Organised by Academic Staff College, North Bengal University
 West Bengal, India.

- **Lecturer**
 Course on Dark Energy
Winter School on Cosmology (WSC15) Dec2015-Jan2016
 Organised by Indian Statistical Institute, Kolkata
 West Bengal, India.

LIST OF PUBLICATION

1. **Model-Agnostic Cosmological Inference with SDSS-IV eBOSS: Simultaneous Probing for Background and Perturbed Universe**
Purba Mukherjee, Anjan A. Sen
arXiv: 2412.13973.
2. **Further support for S_8 increasing with effective redshift**
Ozgur Akarsu, Eoin O. Colgin, Anjan A. Sen, M.M. Sheikh-Jabbari
arXiv: 2410.23134.
3. **Exploring Alternative Cosmologies with the LSST: Simulated Forecasts and Current Observational Constraints**
Dharmendra Kumar, Ayan Mitra, Shahnawaz A. Adil, Anjan A. Sen
arXiv: 2406.06757, To Appear in Phys. Rev. D.
4. **Inferring dark energy properties from the scale factor parametrization**
Upala Mukhopadhyay, Sandeep Haridasu, Anjan A. Sen, Suhail Dhawan
Phys.Rev.D, **110**, 123516 (2024).
5. **The Excess of JWST Bright Galaxies: a Possible Origin in the Ground State of Dynamical Dark Energy in the light of DESI 2024 Data**
Nicola Menci, Anjan A Sen and Marco Castellano
Astrophys.J. **976**, 227 (2024)
6. **Model-independent cosmological inference post DESI DR1 BAO measurements**
Purba Mukherjee, Anjan Ananda Sen
Phys. Rev. D, **110**, 123502 (2024)
7. **Revisiting the concordance CDM model using Gamma-Ray Bursts together with supernovae Ia and Planck data**
Shahnawaz A. Adil, Maria G. Dainotti, Anjan A. Sen
JCAP **08**, 015 (2024).
8. **CDM Tensions: Localising Missing Physics through Consistency Checks**
Ozgur Akarsu, Eoin O. Colgain, Anjan A. Sen, M.M. Sheikh-Jabbari
Universe **10**, 305, (2024).
9. **Negative cosmological constant in the dark energy sector: tests from JWST photometric and spectroscopic observations of high-redshift galaxies**
Nicola Menci, Shahnawaz A. Adil, Upala Mukhopadhyay, Anjan A. Sen, Sunny Vagnozzi
JCAP **07**, 072, (2024)

10. **Gravitational atoms in the braneworld scenario**
Sunil Singh Bohra, Subhodeep Sarkar, Anjan Ananda Sen
Phys.Rev.D **109**, 104021 (2024).
11. **Late-time phenomenology required to solve the H0 tension in view of the Cosmic ladders and the anisotropic and angular BAO data**
Adria Gomez-Valent, Arianna Favale, Marina Migliaccio and Anjan A Sen
Phys. Rev. D **109** 023525 (2024).
12. **Post-reionization HI-21 cm signal:a probe of negative cosmological constant**
Chandrachud B. V. Dash, Tapomoy Guha Sarkar and Anjan A Sen
Mon. Not. Roy. Astron. Soc., **527**, 11694 (2024)
13. **Omnipotent dark energy: A phenomenological answer to the Hubble tension**
Shahnawaz A. Adil, Ozgur Akarsu, Eleonora Di Valentino, Rafael C. Nunes, Emre Ozulker, Anjan A. Sen, Enrico Specogna
Physical Review D, **109**, 023527 (2024).
14. **S_8 increases with effective redshift in Λ CDM cosmology**
Shahnawaz A. Adil, Ozgur Akarsu, Mohammad Malekjani, Eoin Colgin, Saeed Pourojaghi, Anjan A. Sen, M. M. Sheikh-Jabbari
Mon. Not. Roy. Astron. Soc. Lett, **528**, L20 (2024).
15. **Coupled Multi Scalar Field Dark Energy**
J. Alberto Vazquez, David Tamayo, Gabriela Garcia-Arroyo, Isidro Gmez-Vargas, Israel Quiros, Anjan A. Sen
Phys. Rev.D **109**, 023511 (2024)
16. **Dark energy in light of the early JWST observations: case for a negative cosmological constant?**
Shahnawaz A. Adil, Upala Mukhopadhyay, Anjan A. Sen, Sunny Vagnozzi
JCAP, **10** 072 (2023)
17. **Post-reionization 21-cm power spectrum for bimetric gravity and its detectability with SKA1-mid telescope**
Ajay Bassi, Bikash R. Dinda, Anjan A. Sen
J.Astrophys.Astron. **44** , 93 (2023).
18. **Traversable wormholes in bi-metric gravity**
Mostafizur Rahman, Anjan A Sen, Sunil Singh Bohra
Phys. Rev. D **108**, 104008 (2023).
19. **Observational Constraints on Axion(s) with a Cosmological Constant**
Ruchika, Koushik Dutta, Ankan Mukherjee, Anjan A. Sen
Phys.Dark Univ. **40**, 101199 (2023).

20. **Cosmological Evolution in Bimetric Gravity: Observational Constraints and LSS Signatures**
Ajay Bassi, Shahnawaz A. Adil, Manvendra Pratap Rajvanshi, Anjan A. Sen
Eur.Phys.J.C 83, 525 (2023)
21. **21 cm Power Spectrum in interacting cubic Galileon model**
Bikash K. Dinda, Md. Wali Hossain and Anjan A Sen
J.Astrophys.Astron. 44, 85 (2023).
22. **Cosmology intertwined: A review of the particle physics, astrophysics, and cosmology associated with the cosmological tensions and anomalies**
E. Abdalla et al.
JHEAp, **34**, 49 (2022) **cited 302 times**.
23. **Do cosmological observations allow a negative Λ ?**
Anjan A. Sen, Shahnawaz A. Adil, Somasri Sen
Mon. Not. Roy. Astron. Soc. 518, 1098-1105, (2022).
24. **Dynamics of tachyon dark energy on large scales and its imprint on observed galaxy power spectrum**
Ajay Bassi, Ankan Mukherjee and Anjan A Sen
Phys.Rev.D **103**, 123522 (2021)
25. **Bayesian model selection on Scalar ϵ -Field Dark Energy**
J. Alberto Vazquez, David Tamayo, Anjan A. Sen, Israel Quiros
Phys.Rev.D **103**, 043506 (2021)
26. **Dark Energy with Phantom Crossing and the H_0 tension**
Eleonora Di Valentino, Ankan Mukherjee, Anjan A. Sen
Entropy **23** 404 (2021).
Cited 108 times
27. **Cosmology Intertwined III: f_8 and S_8**
Eleonora Di Valentino et al.
Astropart.Phys. **131**, 1023604 (2021).
28. **Snowmass2021 - Letter of interest cosmology intertwined IV: The age of the universe and its curvature**
Eleonora Di Valentino et al.
Astropart.Phys. **131**, 1023607 (2021).
29. **Snowmass2021 - Letter of interest cosmology intertwined I: Perspectives for the next decade** Eleonora Di Valentino et al.
Astropart.Phys. **131**, 1023606 (2021).

30. **Snowmass2021 - Letter of interest cosmology intertwined II: The hubble constant tension**
Eleonora Di Valentino et al.
Astropart.Phys. **131**, 1023605 (2021).
31. **Study of cubic Galileon gravity using N -body simulations**
Jiajun Zhang, Bikash R. Dinda, Md. Wali Hossain, Anjan A. Sen, Wentao Luo
Phys.Rev.D **102** 4, 043510 (2020).
32. **Is there an early Universe solution to the Hubble tension?**
Chethan Krishnan, Eoin . Colgin, Ruchika, Anjan A. Sen, M.M. Sheikh-Jabbari, Tao Yang.
Phys.Rev.D **102** 10, 103525 (2020).
Cited 67 times
33. **Beyond Λ CDM with low and high redshift data: implications for dark energy**
Koushik Dutta, Ruchika, Anirban Roy, Anjan A Sen, M.M. Sheikh-Jabbari
Gen.Rel.Grav. **52**, 15, (2020).
Cited 79 times
34. **Cosmology with low-redshift observations: No signal for new physics**
Koushik Dutta, Anirban Roy, Ruchika, Anjan A. Sen, M.M. Sheikh-Jabbari
Phys.Rev. D **100**, 103501 (2019).
35. **Fate of Strong Cosmic Censorship Conjecture in Presence of Higher Spacetime Dimensions**
Mostafizur Rahman, Sumanta Charkraborty, Soumitra Sengupta, Anjan A Sen
JHEP, **1903**, 178 (2019).
36. **Astrophysical Signatures of Black holes in Generalized Proca Theories**
Mostafizur Rahman, Anjan A Sen
Physical Review D, **99**, 024052 (2019).
37. **Model independent constraints on dark energy evolution from low-redshift observations**
Salvatore Capozziello, Ruchika, Anjan A Sen
Monthly Notices of Royal Astronomical Society, **484**, 4484, (2019).
Cited 89 times
38. **A new recipe for Λ CDM**
Varun Sahni and Anjan A Sen
The European Physical Journal C **77**, 225 (2017).

39. **Prospects of probing quintessence with HI 21-cm intensity mapping survey**
 Azam Hossain, Shruti Thakur, Tapomoy Guha Sarkar, Anjan A Sen
 arXiv:1603.02087 [astro-ph.CO]
 Monthly Notices of Royal Astronomical Society, **463**, 3492, (2016).
40. **Thirty Meter Telescope Detailed Science Case: 2015**
 W. Skidmore *et al.*
 Res.Astron.Astrophys. **15**, 1945 (2015). arXiv:1505.01195 [astro-ph.IM].
41. **ScalPy: A Python Package for late time scalar field cosmology**
 Sumit Kumar, Abhishek Jana and Anjan A Sen
 arXiv:1502.02407[astro-ph.CO].
42. **Thawing quintessence from the inflationary epoch to today**
 Gaveshna Gupta, Raghavan Rangarajan and Anjan A Sen
 Phys.Rev.D **92**, 123003 (2015).
43. **A Geometric Approach to Modulus Stabilization**
 Sampurn Ananda, Debajyoti Choudhury, Anjan A Sen and Soumitra Sengupta
 Physical Review D, **92**, 026008 (2015).
44. **Cosmological evolution in a two-brane warped geometry model**
 Sumit Kumar, Anjan A Sen and Soumitra Sengupta
 Physics Letters B, **747**, 351, (2015).
45. **Post-Planck Dark Energy Constraints**
 Dhiraj Kumar Hazra, Subhabrata Majumdar, Supratik Pal, Sudhakar Panda and Anjan A Sen
 Physical Review D, **91**, 0835005 (2015).
46. **Clustering GCG: a viable option for unified dark matter-dark enegy**
 Sumit kumar and Anjan A Sen
 JCAP, **10** 036 (2014).
47. **Inflationary generalized Chaplygin gas and dark energy in the light Plank and BICEP2 experiment**
 Bikas R DInda, Sumit Kumar and Anjan A Sen
 Physical Review D, **90**, 083515 (2014).
48. **Can structure formation distinguish Λ CDM from non-minimal $f(R)$ gravity?**
 Shruti Thakur and Anjan A Sen
 Physical Review D **88**, 044043 (2013).
49. **Cosmology with Axion-quintessence coupled with Dark Matter**
 Sumit Kumar, Sudhakar Panda and Anjan A Sen
 Classical and Quantum Gravity, **30**, 155011 (2013).

50. **Constraining Thawing Dark Energy Using Galaxy Number Counts**
N. Chandrachani Devi, T. Roy Choudhury and Anjan A Sen
Monthly Notices of Royal Astronomical Society, **432**, 1513, (2013).
51. **DBI Galileon and Late time acceleration of the universe**
Sampurnanand and Anjan A Sen
JCAP, **1212**, 019, (2012)
52. **Deviation From Λ CDM With Cosmic Strings Networks**
Sumit Kumar, Akhilesh Nautiyal and Anjan A Sen
The European Physical Journal C **73**, 2562 (2013).
53. **Thawing Versus. Tracker Behaviour: Observational Evidence**
Shruti Thakur, Akhilesh Nautiyal, Anjan A Sen and T.R. Seshadri
Monthly Notices of Royal Astronomical Society, **427**, 988 (2012).
54. **Do Observations Favour Galileon Over Quintessence?**
Md. Wali Hossain and Anjan A Sen
Physics Letters B, **713**, 140, (2012).
55. **GCG Parametrization for Growth Function and Current Constraints**
Gaveshna Gupta, Somasri Sen and Anjan A Sen
JCAP **1204**, 028, (2012).
56. **Constraining Thawing Quintessence**
Gaveshna Gupta, Subhabrata Majumdar and Anjan A Sen
Monthly Notices of Royal Astronomical Society, **420**, 1309, (2012).
57. **Cosmology of Horava-Lifshitz $f(R)$ Gravity**
Sayan K. Chakrabarti, Koushik Dutta and Anjan A Sen
Physics Letters B, **711**, 147 (2012).
58. **Observational Constraints on Axions as Quintessence in String Theory**
Gaveshna Gupta, Sudhakar Panda and Anjan A Sen
Physical Review D, **85**, 023501 (2012).
59. **Standard Cosmology Delayed**
Debajyoti Choudhury, Debashis Ghoshal and Anjan A Sen
JCAP, **1202**, 046 (2012).
60. **Horava-Lifshitz cosmology with generalized Chaplygin gas**
Amna Ali, Sourish Dutta, Emmanuel N. Saridakis, Anjan A. Sen
General Relativity and Gravitation, **44**, 657, (2012).
Cited 24 times.
61. **WMAP Constraints On K-Inflation**
N. Chandrachani Devi, Akhilesh Nautiyal and Anjan A Sen
Physical Review D, **84**, 103504 (2011).

62. **Solar Syestem Constraints on Scalar Tensor Theories with Non-Standard Action**
N. Chandrachani Devi, Sudhakar Panda and Anjan A Sen
Physical Review D, **84**, 063521 (2011).
63. **Non-minimally coupled $f(R)$ Cosmology**
Shruti Thakur, Anjan A Sen, T.R. Seshadri
Physical Letters B, **696**, 309 (2011).
64. **Evolution of Spherical Overdensity in Thawing Dark energy Models**
N.Chandrachani Devi, Anjan A Sen
Monthly Notices of Royal Astronomical Society, **413**, 2371 (2011).
65. **A new approach to modified-gravity models**
Sayan K. Chakrabarti, Emmanuel N. Saridakis, Anjan A. Sen
General Relativity and Gravitation, **43**, 3065 (2011).
66. **Background cosmological dynamics in $f(R)$ gravity and observational constraints**
Amna Ali, Radouane Gannouji, M. Sami, Anjan A. Sen
Physical Review D, **81**, 104029 (2010).
Cited 19 times.
67. **The thawing dark energy dynamics: Can we detect it?**
S. Sen, A.A. Sen and M. Sami
Physics Letters B,**686**,1 (2010).
68. **Cosmology with non-minimally coupled K-Field**
A.A. Sen and N. Chandrachani Devi
General Relativity and Gravitation, **42**, 821 (2010).
69. **Non-minimal quintessence and phantom with nearly flat potentials**
Gaveshna Gupta, Emmanuel N. Saridakis, Anjan A. Sen
Physical Review D, **79**, 123013 (2009).
Cited 65 times.
70. **The transient and the late time attractor tachyon dark energy: Can we distinguish it from quintessence ?**
Amna Ali, M. Sami, A.A. Sen
Physical Review D, **79**, 123501 (2009).
Cited 24 times.
71. **Non-Minimal Quintessence with nearly flat potential**
Anjan A Sen, Gaveshna Gupta and Sudipta Das
JCAP **0909**, 027 (2009).
72. **Phantom Dark Energy Models with a Nearly Flat Potential**
Robert J. Scherrer, A.A. Sen

Physical Review D, **78**, 067303 (2008)

Cited 75 times.

73. Cosmological Scaling Solutions with Tachyon:Modified Gravity Model

A.A. Sen and N.Chandrachani Devi

Physics Letters B **668**, 182 (2008).

74. Reconstructing the interaction rate in holographic models of dark energy

Anjan A Sen and Diego Pavon

Physics letters **B 664**, 7 (2008).

75. Thawing quintessence with a nearly flat potential

Robert J. Scherrer, A.A. Sen

Physical Review D, **77**, 083515 (2008)

Cited 180 Times.

76. Deviation for Λ CDM: Pressure Parametrization

A.A. Sen

Physical Review D **77**, 043508 (2008).

77. The Weak Energy Condition and the Expansion of the History of the Universe

A.A. Sen and R.J. Scherrer

Physics Letters B, **659**, 457 (2008)

Cited 59 Times.

78. Phantom Dark Energy Models with Negative Kinetic Term

J. Kujat, R.Scherrer and A.A. Sen

Physical Review D **74**, 083501, (2006)

Cited 66 times.

79. Tachyon Matter in Loop-Inspired Cosmology

A.A. Sen

Physical Review D **74**, 045301 (2006).

80. Reconstructing K-essence

A.A. Sen

Journal of Cosmology and Astroparticle Physics **03**, 010 (2006)

Cited 38 times.

81. Structure Formation and CMBR Anisotropy Spectrum in the Inflation Model

A.A. Sen, Vincenzo F. Cardone, S. Capozziello and A. Troisi

Astronomy and Astrophysics **460**, 29 (2006).

82. **Generalizing the Generalized Chaplygin Gas**
A.A.Sen and Robert Scherrer
Physical Review D **72**, 063511 (2005)
Cites 85 times.

83. **Supernovae Constraints on Models of Dark Energy Revisited**
M.C.Bento, O. Bertolami, N.M.C. Santos and A.A. Sen
Physical Review D **71**, 063501, (2005).
Top Cite, cited 85 times

84. **Generalized Chaplygin gas in a modified gravity approach**
T. Barreiro and A. A. Sen
Physical Review D, **70**, 124013 (2004)
Cited 54 times.

85. **The Revival of the Unified Dark Energy-Dark Matter Model?**
M.C. Bento, O. Bertolami and A.A.Sen
Physical Review D, **70**, 083519, (2004).
Top Cite, Cited 236 times

86. **Latest Supernova data in the framework of Generalised Chaplygin Gas model**
O.Bertolami, A.A.Sen, S.Sen, P.T.Silva
Monthly Notices Of Royal Astronomical Society, **353**, 329 (2004).
Top Cite, Cited 185 Times.

87. **WMAP bounds on braneworld tachyonic inflation**
M.C. Bento, N.M.C. Santos, A.A. Sen
International Journal for Modern Physics D, **13**, 1927 (2004).

88. **WMAP and supergravity inflationary models**
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