

Complete list of publications

Bijan Saha

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Journal Publications

- [1] Mahendra Goray, B. Saha:
Observational constraints on a nonlinear spinor field quintessence model in an FLRW universe
European Physical Journal C **86**(1), 19 (2026)
DOI: [10.1140/epjc/s10052-025-15230-6](https://doi.org/10.1140/epjc/s10052-025-15230-6)
- [2] Mahendra Goray, B. Saha:
Observational Constraints on a Spinor Field Generalized Chaplygin Gas Model in a Spherically Symmetric FLRW Spacetime
European Physical Journal C **85**(10), 1146 (2025)
DOI: [10.1140/epjc/s10052-025-14895-3](https://doi.org/10.1140/epjc/s10052-025-14895-3)
<https://doi.org/10.48550/arXiv.2509.09733>
- [3] Bijan Saha:
Spinor field in Bianchi type-I cosmology with Lyra's geometry
Journal of Mathematical Physics **66**(10), 102501 (2025)
DOI: [10.1063/5.0270836](https://doi.org/10.1063/5.0270836)
ArXiv: [2503.11326V1](https://arxiv.org/abs/2503.11326)[gr-qc] (2025)
- [4] Bijan Saha:
Spinor field in FLRW cosmology: spherically symmetric case
Journal of Experimental and Theoretical Physics **167** (1), 49 - 58 (2025)
DOI: [10.31857/S0044451025010043](https://doi.org/10.31857/S0044451025010043)
- [5] Bijan Saha:
Spinor field in cosmology with Lyra's geometry: Bianchi type-I model
Space Time and Fundamental Interactions (1), 187 - 195 (2025)
DOI: [10.17238/issn2226-8812.2025.1.187-195](https://doi.org/10.17238/issn2226-8812.2025.1.187-195)
- [6] Bijan Saha:
Maxwell-Dirac system in cosmology
International Journal of Modern Physics A (**39**)(**29**), **2450117** (17 pages) (2024)
DOI: [10.1142/S0217751X24501173](https://doi.org/10.1142/S0217751X24501173)
ArXiv:[2307.10970](https://arxiv.org/abs/2307.10970)[gr-qc] (2023)

- [7] Bijan Saha:
Interacting Spinor and Electromagnetic fields in cosmology
Space Time and Fundamental Interactions (1), 22 - 26 (2024)
DOI: [10.17238/issn2226-8812.2024.1.22-26](https://doi.org/10.17238/issn2226-8812.2024.1.22-26)
- [8] Bijan Saha:
Spinor field in FLRW cosmology
Universe 9(5), 243 (2023)
DOI:[10.3390/universe9050243](https://doi.org/10.3390/universe9050243)
- [9] Bijan Saha:
Spinor field in Bianchi type-II Universe
Romanian Journal of Physics 68 101 (18 pages) (2023)
ArXiv: [1708.07726](https://arxiv.org/abs/1708.07726) [physics.gen-ph] (2017)
- [10] Bijan Saha:
Time-dependent Spinor field in a static cylindrically symmetric space-time
The European Physical Journal Plus 137 1063 (2022)
DOI [10.1140/epjp/s13360-022-03275-5](https://doi.org/10.1140/epjp/s13360-022-03275-5)
ArXiv: [2205.02603](https://arxiv.org/abs/2205.02603) [gr-qc] (2022)
- [11] Bijan Saha:
Static spherically symmetric space-time: some remarks
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- [13] Arsenii S. Gavrikov, Bijan Saha, Victor S. Rikhvitsky:
Applying Friedmann models to describe the evolution of the Universe based on data from the SAI Supernovae Catalog
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DOI: [10.22363/2658-4670-2020-28-2-120-131](https://doi.org/10.22363/2658-4670-2020-28-2-120-131)
- [14] Bijan Saha, Evgeniy I. Zakharov, Victor S. Rikhvitsky:
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Non-minimally coupled nonlinear spinor field in FRW cosmology
Astrophysics and Space Science 365 68 (2020)
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- [25] Bijan Saha and Victor S Rikhvitsky:
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- [40] Victor Rikhvitsky, Bijan Saha and Mihai Visinescu:
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