

List of publications by Bijan Saha

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Bianchi Type Cosmological Models

- [1] Bijan Saha: *Spinor model of a perfect fluid: examples* arXiv: 0902.2097 [gr-qc].
- [2] Bijan Saha: *Spinor model of a perfect fluid* arXiv: 0901.1387 [gr-qc].
- [3] Bijan Saha, Victor Rikhvitsky and Mihai Visinescu: *Bianchi type-I string cosmological model in the presence of a magnetic flux: exact and qualitative solutions* arXiv: 0812.1443 [gr-qc].
- [4] Bijan Saha: *Early inflation, isotropization and late-time acceleration of a Bianchi type-I universe* (to be published in Physics of Particles and Nuclei) (in Russian).
- [5] Bijan Saha and Victor Rikhvitsky: *Nonlinear spinor fields in anisotropic Universe filled with viscous fluid: Exact solutions and qualitative analysis* (to be published in Physics of Particles and Nuclei) (in Russian).
- [6] Bijan Saha and Victor Rikhvitsky: *Anisotropic cosmological models with spinor and scalar fields and viscous fluid in presence of a Λ term: qualitative solutions* Journal of Mathematical Physics **49**, 112502 (2008) arXiv: 0803.3544v2[gr-qc].
- [7] Bijan Saha and Mihai Visinescu: *String cosmological model in the presence of a magnetic flux* Astrophysics and Space Science **315**,99-104, (2008); arXiv: 0803.2414[gr-qc].
- [8] Bijan Saha and Victor Rikhvitsky: *Anisotropic cosmological models with spinor field and viscous fluid in presence of a Λ term: qualitative solutions* Journal Physics A: Mathematical and Theoretical **40** 14011-14027, (2007); arXiv: 0705.3128V1[gr-qc].
- [9] Bijan Saha: *Interacting spinor and scalar fields in Bianchi type-I Universe filled with viscous fluid: exact and numerical solutions* [arXiv: gr-qc/0703124].
- [10] Bijan Saha and Victor Rikhvitsky: *Bianchi-I cosmological model with viscous fluid and nonlinear spinor field: a qualitative analysis* PFU Reports: Mathematics, Informatics and Physics. No. 3-4, 130 - 134 (2007) [in Russian].
- [11] Bijan Saha: *Nonlinear spinor field in Bianchi type-I Universe filled with viscous fluid: numerical solutions* Astrophysics and Space Science **312** 3-11, (2007) [arXiv: gr-qc/0703085].
- [12] Bijan Saha: *Spinor fields in Bianchi type-VI Cosmology* PFU Reports: Mathematics, Informatics and Physics. No. 1-2, 62 - 65 (2007) [in Russian].

- [13] Bijan Saha: *Interacting spinor and scalar fields in Bianchi cosmology* [arXiv: gr-qc/0701059].
- [14] Bijan Saha: *Nonlinear spinor field in Bianchi type-I cosmology: inflation, isotropization, and late time acceleration* Physical Review D **74**, 124030, (2006).
- [15] Gu, Ying-Qiu and Bijan Saha: *The covariant derivatives and energy momentum tensor of spinors* [arXiv: gr-qc/0609043].
- [16] Bijan Saha: *Nonlinear spinor field in Bianchi type-I cosmology: accelerated regimes* Romanian Reports in Physics **59**(2) 649-660, (2007) [arXiv: gr-qc/0608047].
- [17] Bijan Saha: *Spinor fields in Bianchi type-I Universe* Physics of Particles and Nuclei **37** Suppl. 1, S13-S44, (2006).
- [18] Bijan Saha, Victor Rikhvitsky and Mihai Visinescu: *Bel-Robinson tensor and Dominant Property in the Bianchi type I universe* Modern Physics Letters A **21**(11) 847-861, (2006) [arXiv: gr-qc/0512051].
- [19] Bijan Saha: *Spinor field and accelerated regimes in cosmology* Gravitation & Cosmology **12** N. 2-3 (46-47), 215-218, (2006); [arXiv: gr-qc/0512050].
- [20] Bijan Saha: *Anisotropic cosmological models with perfect fluid and dark energy reexamined* International Journal of Theoretical Physics. **45**(5) 983-995, (2006). [arXiv: gr-qc/0501067].
- [21] Bijan Saha: *Anisotropic cosmological models with a perfect fluid and a Λ term* Astrophysics and space science **302**, 83-91, (2006). [arXiv: gr-qc/0411080].
- [22] Bijan Saha and V. Rikhvitsky: *Bianchi type I universe with viscous fluid and a Λ term: A qualitative analysis* Physica D **219**, 168-176, (2006) [arXiv: gr-qc/0410056].
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Solitons in General Relativity

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Soliton Model of Atom

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