

# 論文リスト

## [査読付き研究論文]

1. “Quantum fluctuations in brane-world inflation without an inflaton on the brane”,  
Norichika Sago, Yoshiaki Himemoto, Misao Sasaki,  
Physical Review D, Vol.**65**, Iss.2, 024014 (2002).
2. “Gauge problem in the gravitational self-force: Harmonic gauge approach in the Schwarzschild background”,  
Norichika Sago, Hiroyuki Nakano, Misao Sasaki,  
Physical Review D, Vol.**67**, Iss.10, 104017 (2003).
3. “Gauge problem in the gravitational self-force: First post-Newtonian force in the Regge-Wheeler gauge”,  
Hiroyuki Nakano, Norichika Sago, Misao Sasaki,  
Physical Review D, Vol.**68**, Iss.12, 124003 (2003).
4. “A New Analytical Method for Self-Force Regularization. I Charged Scalar Particles in Schwarzschild Spacetime”,  
Wataru Hikida, Sanjay Jhingan, Hiroyuki Nakano, Norichika Sago, Misao Sasaki,  
Takahiro Tanaka,  
Progress of Theoretical Physics, Vol.**111**, Iss.6, pp.821-840 (2004)
5. “Gravitational wave memory of gamma-ray burst jets”,  
Norichika Sago, Kunihito Ioka, Takashi Nakamura, Ryo Yamazaki,  
Physical Review D, Vol.**70**, Iss.10, 104012 (2004).
6. “A New Analytical Method for Self-Force Regularization. II Testing the Efficiency for Circular Orbits”,  
Wataru Hikida, Sanjay Jhingan, Hiroyuki Nakano, Norichika Sago, Misao Sasaki,  
Takahiro Tanaka,  
Progress of Theoretical Physics, Vol.**113**, Iss.2, pp.283-303 (2005).
7. “Adiabatic Radiation Reaction to Orbits in Kerr Spacetime”,  
Norichika Sago, Takahiro Tanaka, Wataru Hikida, Hiroyuki Nakano,  
Progress of Theoretical Physics, Vol.**114**, Iss.2, pp.509-514 (2005).
8. “Adiabatic Evolution of Orbital Parameters in Kerr Spacetime”,  
Norichika Sago, Takahiro Tanaka, Wataru Hikida, Katsuhiko Ganz, Hiroyuki Nakano,  
Progress of Theoretical Physics, Vol.**115**, Iss.5, pp.873-907 (2006).
9. “Detecting gravitational waves from inspiraling binaries with a network of detectors: Coherent versus coincident strategies”,  
Himan Mukhopadhyay, Norichika Sago, Hideyuki Tagoshi, Sanjeev Dhurandhar, Hirotaka Takahashi, Nobuyuki Kanda,  
Physical Review D, Vol.**74**, Iss.8, 083005 (2006).

10. "Gravitational self-force on a particle in circular orbit around a Schwarzschild black hole", Leor Barack, Norichika Sago,  
Physical Review D, Vol.**75**, Iss.6, 064021 (2007).
11. "Detecting gravitational waves from inspiraling binaries with a network of detectors: Coherent strategies for correlated detectors", Hideyuki Tagoshi, Himan Mukhopadhyay, Sanjeev Dhurandhar, Norichika Sago, Hirotaka Takahashi, Nobuyuki Kanda,  
Physical Review D, Vol.**75**, Iss.8, 087306 (2007).
12. "Adiabatic Evolution of Three 'Constants' of Motion for Greatly Inclined Orbits in Kerr Spacetime", Katsuhiko Ganz, Wataru Hikida, Hiroyuki Nakano, Norichika Sago, Takahiro Tanaka, Progress of Theoretical Physics, Vol.**117**, Iss.6, pp.1041-1066 (2007).
13. " $m$ -mode regularization scheme for the self-force in Kerr spacetime", Leor Barack, Darren A. Gobourn, Norichika Sago,  
Physical Review D, Vol.**76**, Iss.12, 124036 (2007).
14. "Frequency-domain calculation of the self force: The high-frequency problem and its resolution", Leor Barack, Amos Ori, Norichika Sago,  
Physical Review D, Vol.**78**, Iss.8, 084021 (2008).
15. "Two approaches for the gravitational self force in black hole spacetime: Comparison of numerical results", Norichika Sago, Leor Barack, Steven Detweiler,  
Physical Review D, Vol.**78**, Iss.12, 124024 (2008).
16. "Gravitational self-force correction to the innermost stable circular orbit of a Schwarzschild black hole", Leor Barack, Norichika Sago,  
Physical Review Letters, Vol.**102**, Iss.19, 191101 (2009).
17. "Gravitational self-force on a particle in eccentric orbit around a Schwarzschild black hole", Leor Barack, Norichika Sago,  
Physical Review D, Vol.**81**, Iss.8, 084021 (2010).
18. "Precession effect of the gravitational self-force in a Schwarzschild spacetime and the effective one-body formalism", Leor Barack, Thibault Damour, Norichika Sago,  
Physical Review D, Vol.**82**, Iss.8, 084036 (2010).
19. "Beyond the geodesic approximation: conservative effects of the gravitational self-force in eccentric orbits around a Schwarzschild black hole", Leor Barack, Norichika Sago,  
Physical Review D, Vol.**83**, Iss.8, 084023 (2011).

20. "Periastron Advance in Black Hole Binaries",  
Alexandre Le Tiec, Abdul H. Mroué, Leor Barack, Alessandra Buonanno, Harald P. Pfeiffer,  
Norichika Sago, Andrea Taracchini,  
Physical Review Letters, Vol.**107**, Iss.14, 141101 (2011).
21. "Cosmic censorship in overcharging a Reissner-Nordström black hole via charged particle absorption",  
Soichiro Isoyama, Norichika Sago, Takahiro Tanaka,  
Physical Review D, Vol.**84**, Iss.12, 124024 (2011).
22. "Evolution of inspiral orbits around a Schwarzschild black hole",  
Niels Warburton, Sarp Akcay, Leor Barack, Jonathan R. Gair, Norichika Sago,  
Physical Review D, Vol.**85**, Iss.6, 061501(R) (2012).
23. "Gravitational self-force and the effective-one-body formalism between the innermost stable circular orbit and the light ring",  
Sarp Akcay, Leor Barack, Thibault Damour, Norichika Sago,  
Physical Review D, Vol.**86**, Iss.10, 104041 (2012).
24. "Impact of the second-order self-forces on the dephasing of the gravitational waves from quasicircular extreme mass-ratio inspirals",  
Soichiro Isoyama, Ryuichi Fujita, Norichika Sago, Hideyuki Tagoshi, Takahiro Tanaka,  
Physical Review D, Vol.**87**, Iss.2, 024010 (2013).
25. "Isofrequency pairing of geodesic orbits in Kerr geometry",  
Niels Warburton, Leor Barack, Norichika Sago,  
Physical Review D, Vol.**87**, Iss.8, 084012 (2013).
26. "Evolution of the Carter constant for resonant inspirals into a Kerr black hole: I. The scalar case",  
Soichiro Isoyama, Ryuichi Fujita, Hiroyuki Nakano, Norichika Sago, Takahiro Tanaka,  
Progress of Theoretical and Experimental Physics, Vol.**2013**, Iss.6, 063E01 (2013).
27. "Comparison Between Self-Force and Post-Newtonian Dynamics: Beyond Circular Orbits",  
Sarp Akcay, Alexandre Le Tiec, Leor Barack, Norichika Sago, Niels Warburton,  
Physical Review D, Vol.**91**, Iss.12, 124014 (2015).
28. "Calculation of radiation reaction effect on orbital parameters in Kerr spacetime",  
Norichika Sago, Ryuichi Fujita,  
Progress of Theoretical and Experimental Physics, Vol.**2015**, Iss.7, 073E03 (2015).
29. "Accuracy of the post-Newtonian approximation for extreme mass ratio inspirals from a black-hole perturbation approach",  
Norichika Sago, Ryuichi Fujita, Hiroyuki Nakano,  
Physical Review D, Vol.**93**, Iss.10, 104023 (2016).

30. "Estimate of the radius responsible for quasinormal modes in the extreme Kerr limit and asymptotic behavior of the Sasaki–Nakamura transformation",  
Hiroyuki Nakano, Norichika Sago, Takahiro Tanaka, Takashi Nakamura,  
Progress of Theoretical and Experimental Physics, Vol.**2016**, Iss.8, 083E01 (2016).
31. "Gravitational-Wave Background from Binary Mergers and Metallicity Evolution of Galaxies",  
Ken'ichiro Nakazato, Yuu Niino, Norichika Sago,  
The Astrophysical Journal, Vol.**832**, No.2, 146 (2016).
32. "Hamiltonian formulation of the conservative self-force dynamics in the Kerr geometry",  
Ryuichi Fujita, Soichiro Isoyama, Alexandre Le Tiec, Hiroyuki Nakano, Norichika Sago,  
Takahiro Tanaka,  
Classical and Quantum Gravity, Vol.**34**, No.13, 134001 (2017).
33. "Black hole ringdown echoes and howls",  
Hiroyuki Nakano, Norichika Sago, Hideyuki Tagoshi, Takahiro Tanaka,  
Progress of Theoretical and Experimental Physics, Vol.**2017**, Iss.7, 071E01 (2017).
34. "Note on accuracy of the post-Newtonian approximation for extreme-mass ratio inspirals: retrograde orbits",  
Ryuichi Fujita, Norichika Sago, Hiroyuki Nakano,  
Classical and Quantum Gravity, Vol.**35**, No.2, 027001 (2017).
35. "Flux-balance formulae" for extreme mass-ratio inspirals",  
Soichiro Isoyama, Ryuichi Fujita, Hiroyuki Nakano, Norichika Sago, Takahiro Tanaka,  
Progress of Theoretical and Experimental Physics, Vol.**2019**, Iss.1, 013E01 (2019).
36. "Searching for black hole echoes from the LIGO-Virgo catalog GWTC-1",  
Nami Uchikata, Hiroyuki Nakano, Tatsuya Narikawa, Norichika Sago, Hideyuki Tagoshi,  
Takahiro Tanaka,  
Physical Review D, Vol.**100**, Iss.6, 062006 (2019).
37. "Self-force effects on the marginally bound zoom-whirl orbit in Schwarzschild spacetime",  
Leor Barack, Marta Colleoni, Thibault Damour, Soichiro Isoyama, Norichika Sago,  
Physical Review D, Vol.**100**, Iss.12, 124015 (2019).
38. "Gravitational wave echoes induced by a point mass plunging to a black hole",  
Norichika Sago, Takahiro Tanaka,  
Progress of Theoretical and Experimental Physics, Vol.**2020**, Iss.12, 123E01 (2020).
39. "Scope Out Multiband Gravitational-Wave Observations of GW190521-Like Binary Black Holes with Space Gravitational Wave Antenna B-DECIGO",  
Hiroyuki Nakano, Ryuichi Fujita, Soichiro Isoyama, Norichika Sago,  
Universe, Vol.**7**, Iss.3, 53 (2021).

40. "Overview of KAGRA : KAGRA science",  
Tomotada Akutsu, et al. (KAGRA Collaboration:246 名), (応募者は 160 番目に記載)  
Progress of Theoretical and Experimental Physics, Vol.**2021**, No.5, 05A103 (2021).
41. "The current status of contribution activities in Japan for LISA",  
Kiwamu Kiwamu, Norichika Sago, et al. (21 名),  
Progress of Theoretical and Experimental Physics, Vol.**2021**, No.5, 05A106 (2021).
42. "Oscillations in the EMRI gravitational wave phase correction as a probe of reflective boundary of the central black hole",  
Norichika Sago, Takahiro Tanaka,  
Physical Review D, Vol.**104**, No.6, 064009 (2021)
43. "Fundamental Tone and Overtones of Quasinormal Modes in Ringdown Gravitational Waves: A Detailed Study in Black Hole Perturbation",  
Norichika Sago, Soichiro Isoyama, Hiroyuki Nakano,  
Universe, Vol.**7**, Iss.10, 357 (2021)

#### [投稿中の論文]

44. "Adiabatic waveforms from extreme-mass-ratio inspirals: an analytical approach",  
Soichiro Isoyama, Ryuichi Fujita, Alvin J. K. Chua, Hiroyuki Nakano, Adam Pound,  
Norichika Sago,  
arXiv 番号: 2111.05288 (2021 年 11 月 24 日投稿)

#### [査読付き議事録等]

45. "Gravitational self-force effects on a point mass moving around a Schwarzschild black hole", Norichika Sago, Classical and Quantuam Gravity, Vol.**26**, No.9, 094025 (2009).
46. 「重力波初観測を受けて：その成果と意義」、佐合 紀親、日本物理教育学会九州支部会報「九州の物理教育」、Vol.2, 54-57 頁, 2016 年.

#### [学位論文]

47. 「ブレーンワールドインフレーションモデルにおけるバルクスカラー場の量子揺らぎの評価」、佐合 紀親、2001 年 3 月 (修士論文、大阪大学).
48. "Self-force regularization of a particle orbiting a Schwarzschild black hole",  
佐合 紀親、2004 年 3 月 (博士論文、大阪大学).