

SUSHANT G. GHOSH

CURRICULUM VITAE (ABRIDGED)

Jamia Millia Islamia
New Delhi – 110 025;
Email:- sghosh2@jmi.ac.in,
Telephone:- +91-11-26984830 EXT 25 [W];
+91-11-26981717, Ext 1012,1033, 3232 [W]
ORCID iD
<https://orcid.org/0000-0002-0835-3690>

L-101, Park Grandeura, Sector-82,
Faridabad – Haryana 121004
Email:- sgghosh@gmail.com
Telephone: +91-129 4080101 [H] +91-
99971348628 [Mobile]
DATE OF BIRTH: 14.01.1964

Sushant Ghosh is a Professor at CTP, Jamia Millia Islamia, Delhi with over 25 years of experience in Academic and Research. He was first Director (Research) of the University and founder Director, Multidisciplinary Centre for Advanced Research and Studies, Jamia Millia Islamia. He was formerly Associate Professor in the Dept of Mathematics at BITS Pilani Dubai. His teaching and research focus on rotating black holes, general relativity, gravitational collapse, and Astrophysics. He has published several research articles in peer-reviewed journals. Sushant, with national and international collaborators, in his ongoing project, has addressed some of the key issues of black hole physics with his focus on theoretical and computational aspects. His work has been very well received by the international community and the research work is done is important and of a high standard which led to President award for research to him with his colleagues in 2015. He has ongoing research projects funded by DST, ICTP – Italy. He is also an Honorary Professor at School of Mathematical Sciences in University of Kwazulu-Natal, South Africa since 2012 besides being a Visiting Associate of Inter-University Centre for Astronomy and Astrophysics (IUCAA), Pune since July 2001. He is also a Fulbright Fellow – 2018 and visited sixteen universities/colleges in the US.

HONOURS AND AWARDS

- Fulbright Fellow – 2018
- Featured in the Standford list of top 2% scientists
- President of India Visitor's Award for Research (2015)
- MHRD – LEAP programme 2019 at JMI and University of Virginia
- Member, Indian Delegation first forum of BRICS Network University, Russia
- Honorary Professor, College of Agriculture and Engineering, School of Mathematics, Statistics and Computer Science, UKZN from 2013-2015, 2016-18, 2019-22.
- Member, ITUN NET – 76 Research Network Funded by ICTP, Italy
- Classical and Quantum Gravity: 2018 Reviewer Awards

APPOINTMENTS

- **First Director (Research)**, Jamia Millia Islamia, New Delhi (March 2015-August 2018)
- **Founder Director**, Multidisciplinary Centre for Advanced Research and Studies, Jamia Millia Islamia
- **Visiting Associate**, Inter University Centre for Astronomy and Astrophysics (IUCAA), Pune (Since July 2001).
- **Honorary Professor**, College of Agriculture and Engineering, School of Mathematics, Statistics and Computer Science, UKZN from 2013-2016, 2016-19,2019-22
- **CVO, Jamia Millia Islamia**

- **Professor**, Centre for Theoretical Physics since 7/2009

QUALIFICATIONS

- **M.Sc.** (1986) – **74.3 %**, **M. Phi.** (1988) – **81 %**, Nagpur University, Nagpur - India
- **Ph.D.** (1996), Nagpur University, Nagpur - India
- **Post-Doctoral Fellow**:-University of Zululand, Department of Mathematics & Computer Science, RSA
- **Fullbright Fellow - 2018**

PREVIOUS POSTS HELD

- **Associate Professor** 12/2003 – 7/2009, BITS, Pilani – **Pilani Campus and DUBAI Campus, UAE**
- **Reader** 3/2000 – 12/2003, Science College, Congress Nagar-Nagpur, **INDIA**
- **Head:** Computer Science Department Science College, Congress Nagar – Nagpur (July 1989-Oct 1995)
- **Sr. Lecturer** 3/1995 – 3/2000, Science College, Congress Nagar-Nagpur, Nagpur, **INDIA**

ADMINISTRATIVE EXPERIENCE

- **Founder Head:** Computer Science Department Science College, Congress Nagar – Nagpur (July 1989-Oct 1995)
- **NAAC, Coordinator of the College which got five star.**
- **NAAC, Core Committee Member for JMI – JMI got A grade by NAAC**
- **Nodal Officer, Visvesvaraya Ph.D. Program for JMI of MEITY, Government of India**
- **Coordinator, Grading (2004 – 08), BITS, Pilani - DUBAI, UAE**
- **Director (Research) , JMI** March 2015-August 2018
- **Officiating Director (several occasions when Director, CTP is on leave; Almost 2 years),** Centre for Theoretical Physics, Jamia Millia Islamia – New Delhi, **INDIA**

RESEARCH INTERESTS/EXPERTISE: rotating black holes, black hole shadow, gravitational lensing, causal structure of singularities, modified theories, general relativity

PH.D. / PROJECT SUPERVISION:- Masters / B. Tech Projects supervised; **INSA summer fellows** Ph.D.candidates: 10 Awarded Currently: 06 candidates working;

Sr. No.	Student	Thesis title	Period of Guideship	Ph. D. awarded in
1.	D W Deshkar	Relativistic Gravitational Collapse and Cosmic Censorship Gravitational	2001-2005	2006
2.	Sanjay Sarwe	Final Fate of Relativistic Gravitational Collapse	2002-2006	2007
3.	N N Saste	Gravitational Collapse and Bulk Viscous Models	2003-2006	2008
4.	Ms Uma Papnoi	Black holes in modified theories of gravity and their properties	27-09-2010-22-04-2016	2016
5.	Pankaj Sheoren	Penrose process and particle acceleration in modified theories of gravity	27-09-2010-09-05-2016	2016
6.	M Amir	Black holes and their properties	18-09-2012-16-11-2017	2018
7.	Fazley Ahmed	Some aspects of rotating black holes	2013-2019	2019

8.	Balendra Pratap Singh	Analytical description of black holes shadow	08-10-2014-2019	2019
9.	Sabir Ali	Black holes in dS/AdS spaces and their thermodynamics	08-10-2014-16-09-2019	2020
10.	Abhineet Agarwal	Accelerated Expansion in Einstein Theory and Modified Gravity	08-10-2014-2019	2020
11.	Ms Hadia Akhtar	Radiating black holes in modified gravities and their properties	08-10-2014-Present	Ongoing
12.	Rahul Kumar	Rotating black holes in modified theories of gravity and their properties	29-10-2015 -Present	Ongoing
13.	Arun Kumar	Regular black holes in Lovelock gravity and their thermodynamics.	29-10-2015 -Present	Ongoing
14.	Shafqat Ul Islam	Black hole shadows and gravitational lensing	01-07-2017-Present	Ongoing
15.	Jitendra Kumar	Lensing and shadows of black holes in modified theories of gravity	01-08-2018 – Present	Ongoing
16.	Ms Misba Afrin	Testing theories of gravities with black hole shadows	01-08-2018-Present	Ongoing

RESEARCH GRANTS AND FELLOWSHIP

- GIAN COURSE – MHRD GOVT OF INDIA – US \$ 8,000 – 2020 (Awarded)
- GIAN COURSE – MHRD GOVT OF INDIA – US \$ 8,000 – 2020 (Awarded)
- ASEAN RESEARCH PROJECT entitled “Testing modified gravities in astrophysics and gravitation” BY **SERB-DST** - IMRC/AISTDF/CRD/2018/000042 – 33 Lakhs (Ongoing)
- **INDO-SOUTH AFRICA Project** “Astrophysical compact objects to probe gravitational theories” BY **DST**, NEW DELHI DST/INT/South Africa/P-06/2016 (2016) - Rs 18 Lakhs (Ongoing)
- GIAN COURSE – MHRD GOVT OF INDIA – US \$ 8,000 – 2018 (Completed)
- GIAN COURSE – MHRD GOVT OF INDIA – US \$ 12,000 – 2016 (Completed)
- Research Project entitled “Black holes in modified theories of gravity and their properties”, **SERB-DST**, New Delhi - SB/S2/HEP-006/2014 (2014) - 35 Lakhs - (Completed)
- Research Project entitled “ Black holes, naked singularities and their formation from gravitational collapse in modified gravity”, University Grants Commission, New Delhi – MRP F. NO. 39-459/2011 – 13 Lakhs (Completed)
- ITUN-NET-76 Research Project India-Thailand-Uzbekistan – Funded by ICTP, ITALY - Travel Expenses + Accommodation+ Per-Diem (2013-2018).
- Research Grants, University Grants Commission, PUNE – MRP No.F.23-118/2001. (Completed)
- **Post Doctoral Fellowship: Department of Mathematics, University of Zululand, RSA (Aug’98-Aug’99).** (Completed)
- Research Grants, University Grants Commission, MRP No.F.23-144/97(WRO), (1997) (Completed)
- Teachers Fellowship, Faculty Improvement Programme UGC, New Delhi (1995). (Completed)

PROJECT/GRANT PROPOSAL PREPARED FOR UNIVESITY (Only Main)

1. COLLEGE WITH POTENTIALS WITH EXCELLENCE PREPARED FOR SCIENCE COLLEGE, NAGPUR – COLLEGE GOT MORE THAN 3 CRORE

2. PROJECT PREPARED and Defended for Visvesvaraya Ph.D. scheme of Deity, Government of India-University got 55 fellowship worth several crores
3. Project Prepared for School of Education under PMMMNMTT, MHRD, Government of India – University 9.5 crores
4. Project Prepared for DONER, , Government of India – University got 5 crores

ACADEMIC VISITS/FELLOWSHIPS (International) (2012 Onwards)

- Visited University of KwaZulu-Natal, Durban, South Africa, 14/03/2020 – 21/05/2020.
- Visited University of KwaZulu-Natal, Durban, South Africa, 15/11/2019 -- 23/12/2019.
- Visited University of KwaZulu-Natal, Durban, South Africa, 16/05/2019 -- 15/06/2019.
- Visited University of Virginia, Charlottesville, Virginia, USA - to attend MHRD - LEAP, USA 22/03/2019 -- 31/03/2019.
- Visited University of KwaZulu-Natal, Durban, South Africa, 04/01/2019 -- 04/02/2019.
- Visited Major USA Universities as Fulbright Fellow 20/10/2018-04/11/2018
- Visiting Scientist , The Institute for Fundamental Study, Thailand 20/03/2018-30/03/2018
- Visited University of KwaZulu-Natal, Durban, South Africa, 09/06/2017 -- 07/07/2017.
- Visited University of Kwa-Zulu Natal Durban, Durban, South Africa, 31/3/2017 -- 3/5/2017.
- Attended International Symposium “New Tendencies of Developing Fundamental and Applied Physics: Problems, Achievements and Perspectives”, Tashkent, Uzbekistan 10/11/2017 -- 11/11/2017. Delivered the invited talk "Black holes with regular centre and Chaired a session"
- Member Indian Delegation, , **Indian Delegation first forum of BRICS Network University** Ural Federal University, Ekaterinburg, Russia April 06-10, 2016
- Visiting Scientist , The Institute for Fundamental Study, Thailand 18/12/2015-30/12/2015
- Visiting Scientist, University of KwaZulu-Natal, Durban, South Africa 05/07/2015-05/09/2015
- Visiting Scientist , The Institute for Fundamental Study, Thailand 07/01/2015 21/07/2015 Gave Short Course on Advanced Topics on Black Holes
- University of the Western Cape, Cape Town, South Africa 04/07/ 2014
- Visiting Scientist, University of KwaZulu-Natal, Durban, South Africa 10/05/2014 –29/ 07/2014.
- Visiting Scientist,Ulugh Beg Astronomical Institute, Tashkent, Uzbekistan 10/11/ 2014 -- 21/11/ 2014.
- Institute of Nuclear Physics, Tashkent, Uzbekistan 11/11/2014.
- Visiting Scientist,University of Kwa-Zulu-Natal, Durban, South Africa 08/2013 --10/ 2013.
- University of Fort Hare, Alice, South Africa, 20/09/2013 --21/09/2013
- Rhodes University, Grahamstown, South Africa, 22/09/2013 --23/09/ 2013
- BITS, Pilani - Dubai campus, UAE 28/10/2013 --29/10/ 2013
- Visiting Scientist , Institute of Nuclear Physics, Tashkent, Uzbekistan 15/11/ 2013 –28/11/2013
- Ulugh Beg Astronomical Institute, Tashkent, Uzbekistan 11/ 2013
- University of Kwa-Zulu-Natal, Durban, south Africa 01/ 2012 -- 03/ 2012
- WITS University, Johannesburg, South Africa 23/01/2012 -- 25/01/ 2012
- Durban University of Technology, Durban, South Africa 06/03/ 2012
- University of Zululand, Kwadalegwa, South Africa 16/03/2012
- Visiting Fellowship: Department of Mathematics, University of Zululand, RSA (Sep-Nov 1996, Jul-Aug'97, and May-August.'2001).
- Post Doctoral Fellowship: Department of Mathematics, University of Zululand, RSA (Aug'98-Aug'99).

MEMBER OF PROFESSIONAL BODIES

- Life Member, Indian National Science Congress, Calcutta.
- Life Member, Indian Mathematical Society, New Delhi.
- Life Member, Indian Association of General Relativity and Gravitation, Pune (Council Member 2004-08).

- Life Member, South African Gravitational Society, RSA

PEER REVIEWER FOR SCHOLARLY JOURNALS

- Physical Review D, Physics Letters B, EPJC, General Relativity Gravitation, International Journal of Modern Physics D
- International Journal of Modern Physics A, Modern Physics Letter A
- Pramana J Phys, Astrophysics Space Science, International Journal of Modern Physics D

COURSES TAUGHT UPON INCLUDE

Mathematical Physics – I and II, Real Analysis Advanced Differential & Integral Calculus, Linear Algebra & Theory Of Complex Variables, ODE, PDE, Laplace Transform Fourier Series & Special Function, Probability And Statistics, Discrete Structure For Computer Science, Numerical Analysis, Classical Mechanics, Basic & Fortran Programming. Dynamics of Particle & Rigid Dynamics, Theory Of Complex Variables, Special Functions, Differential & Integral Calculus, Group Theory & Linear Algebra, Operations Research

SCHOLARLY PEER-REVIEWED ARTICLES IN REFEREED JOURNALS

Publication Summary – (Main Journals)

Sr No.	Journal	Impact Factor - as on 2019	No of Papers
1.	<i>Physical Review D</i>	4.8333	32
2.	<i>Eur. Phys. J. C</i>	4.843	17
3.	<i>Astrophysical J</i>	5.745	02
4.	<i>Phys Lett B</i>	4.384	03
5.	<i>Phys. Dark Univ.</i>	4.473	04
6.	<i>Class. Quant. Grav.</i>	3.071	05
7.	<i>Annals Phys.</i>	2.267	05
8.	<i>JHEP/JCAP</i>	5.875/5.524	1/4
9.	<i>Int.J.Mod.Phys.A/ Int.J.Mod.Phys.D MPLA</i>	2.154/1.153/1.391	9/6/2
10.	<i>Astrophys.Space Sci</i>	2.09	03

Please click

http://inspirehep.net/search?ln=en&p=find+a+ghosh%2C+s.+g.&of=hb&action_search=Search

1. Parameters estimation and strong gravitational lensing of nonsingular Kerr-Sen black holes By Sushant G. Ghosh, Rahul Kumar, Shafqat Ul Islam.
Accepted JCAP.
arXiv:2011.08023 [gr-qc].
2. Effective thermodynamics and critical phenomena of rotating regular-de Sitter black holes By Md Sabir Ali, Sushant G. Ghosh, Sunil D. Maharaj.

- [10.1088/1361-6382/ab9c6c](https://doi.org/10.1088/1361-6382/ab9c6c).
Class.Quant.Grav. 37 (2020) no.18, 185003.
3. 5D rotating regular Myers-Perry black holes and their shadow
By Fazlay Ahmed, Dharm Veer Singh, Sushant G. Ghosh.
arXiv:2008.10241 [gr-qc].
 4. Anti-de Sitter Hayward black holes in Einstein–Gauss–Bonnet gravity
By Sushant G. Ghosh, Arun Kumar, Dharm Veer Singh.
[10.1016/j.dark.2020.100660](https://doi.org/10.1016/j.dark.2020.100660).
Phys.Dark Univ. 30 (2020) 100660.
 5. Nonsingular black hole chemistry
By Arun Kumar, Sushant G. Ghosh, Sunil D. Maharaj.
[10.1016/j.dark.2020.100634](https://doi.org/10.1016/j.dark.2020.100634).
Phys.Dark Univ. 30 (2020) 100634.
 6. Thermodynamics from field equations for charged radiating rotating black hole near horizon
By Uma Papnoi, Sushant G. Ghosh.
[10.1142/S0217751X2050092X](https://doi.org/10.1142/S0217751X2050092X).
Int.J.Mod.Phys. A35 (2020) no.19, 2050092.
 7. Testing Rotating Regular Metrics as Candidates for Astrophysical Black Holes
By Rahul Kumar, Amit Kumar, Sushant G. Ghosh.
arXiv:2006.09869 [gr-qc].
[10.3847/1538-4357/ab8c4a](https://doi.org/10.3847/1538-4357/ab8c4a).
Astrophys.J. 896 (2020) no.1, 89.
 8. Ergosphere and shadow of a rotating regular black hole
By Sushant G. Ghosh, Muhammed Amir, Sunil D. Maharaj.
arXiv:2006.07570 [gr-qc].
[10.1016/j.nuclphysb.2020.115088](https://doi.org/10.1016/j.nuclphysb.2020.115088).
Nucl.Phys. B957 (2020) 115088.
 9. Phase transition of AdS black holes in 4D EGB gravity coupled to nonlinear electrodynamics
By Sushant G. Ghosh, Dharm Veer Singh, Rahul Kumar, Sunil D. Maharaj.
arXiv:2006.00594 [gr-qc].
[10.1016/j.aop.2020.168347](https://doi.org/10.1016/j.aop.2020.168347).
Annals Phys. 424 (2021) 168347.
 10. Noncommutative inspired black holes in regularised 4D Einstein-Gauss-Bonnet theory
By Sushant G. Ghosh, Sunil D. Maharaj.
arXiv:2004.13519 [gr-qc].
 11. Gravitational lensing by charged black hole in regularized 4D Einstein–Gauss–Bonnet gravity
By Rahul Kumar, Shafqat Ul Islam, Sushant G. Ghosh.
arXiv:2004.12970 [gr-qc].
[10.1140/epjc/s10052-020-08606-3](https://doi.org/10.1140/epjc/s10052-020-08606-3).
Eur.Phys.J. C80 (2020) no.12, 1128.
 12. Wormholes in 4D Einstein–Gauss–Bonnet gravity
By Kimet Jusufi, Ayan Banerjee, Sushant G. Ghosh.
arXiv:2004.10750 [gr-qc].
[10.1140/epjc/s10052-020-8287-x](https://doi.org/10.1140/epjc/s10052-020-8287-x).
Eur.Phys.J. C80 (2020) no.8, 698.

13. Shadow of rotating regular black holes and no-horizon spacetimes
By Rahul Kumar, Sushant G. Ghosh.
Accepted Class.Quant.Grav
arXiv:2004.07501 [gr-qc].
14. Gravitational lensing by black holes in the $4D$ Einstein-Gauss-Bonnet gravity
By Shafqat Ul Islam, Rahul Kumar, Sushant G. Ghosh.
arXiv:2004.01038 [gr-qc].
[10.1088/1475-7516/2020/09/030](https://doi.org/10.1088/1475-7516/2020/09/030).
JCAP 2009 (2020) 030.
15. Hayward black holes in the novel $4D$ Einstein-Gauss-Bonnet gravity
By Arun Kumar, Sushant G. Ghosh.
arXiv:2004.01131 [gr-qc].
16. Hayward black holes in Einstein–Gauss–Bonnet gravity
By Arun Kumar, Dharm Veer Singh, Sushant G. Ghosh.
arXiv:2003.14016 [gr-qc].
[10.1016/j.aop.2020.168214](https://doi.org/10.1016/j.aop.2020.168214).
Annals Phys. 419 (2020) 168214.
17. Clouds of strings in $4D$ Einstein–Gauss–Bonnet black holes
By Dharm Veer Singh, Sushant G. Ghosh, Sunil D. Maharaj.
arXiv:2003.14136 [gr-qc].
[10.1016/j.dark.2020.100730](https://doi.org/10.1016/j.dark.2020.100730).
Phys.Dark Univ. 30 (2020) 100730.
18. Generating black holes in $4D$ Einstein-Gauss-Bonnet gravity
By Sushant G. Ghosh, Rahul Kumar.
arXiv:2003.12291 [gr-qc].
[10.1088/1361-6382/abc134](https://doi.org/10.1088/1361-6382/abc134).
Class.Quant.Grav. 37 (2020) no.24, 245008.
19. Radiating black holes in the novel $4D$ Einstein–Gauss–Bonnet gravity
By Sushant G. Ghosh, Sunil D. Maharaj.
arXiv:2003.09841 [gr-qc].
[10.1016/j.dark.2020.100687](https://doi.org/10.1016/j.dark.2020.100687).
Phys.Dark Univ. 30 (2020) 100687.
20. Rotating black holes in $4D$ Einstein-Gauss-Bonnet gravity and its shadow
By Rahul Kumar, Sushant G. Ghosh.
arXiv:2003.08927 [gr-qc].
[10.1088/1475-7516/2020/07/053](https://doi.org/10.1088/1475-7516/2020/07/053).
JCAP 2007 (2020) no.07, 053.
21. Traversable wormholes in $f(R, T)$ gravity satisfying the null energy condition with isotropic pressure
By Ayan Banerjee, M.K. Jasim, Sushant G. Ghosh.
arXiv:2003.01545 [gr-qc]. – Submitted EPJC
22. Five dimensional rotating regular black holes and shadow
By Fazlay Ahmed, Dharm Veer Singh, Sushant G. Ghosh.
arXiv:2002.12031 [gr-qc].
23. Gravitational deflection of light and shadow cast by rotating Kalb-Ramond black holes
By Rahul Kumar, Sushant G. Ghosh, Anzhong Wang.
Phys.Rev. D101 (2020) no.10, 104001.

24. Shadow cast and deflection of light by charged rotating regular black holes
By Rahul Kumar, Sushant G. Ghosh, Anzhong Wang.
Phys.Rev. D100 (2019) no.12, 124024.
25. Bardeen-like regular black holes in $5D$ Einstein-Gauss-Bonnet gravity
By Dharm Veer Singh, Sushant G. Ghosh, Sunil D. Maharaj.
Annals Phys. 412 (2020) 168025.
26. Thermodynamics and phase transition of rotating Hayward-de Sitter black holes
By Md Sabir Ali, Sushant G. Ghosh.
arXiv:1906.11284 [gr-qc]. Submitted EPJC
27. Black string surrounded by a static anisotropic quintessence fluid
By Md Sabir Ali, Fazlay Ahmed, Sushant G. Ghosh.
Annals Phys. 412, (2020), 168024.
28. Rotating black hole shadow in asymptotically safe gravity
By Rahul Kumar, Balendra Pratap Singh, Sushant G. Ghosh.
arXiv:1904.07652 [gr-qc]. - *Annals Phys.* 420 (2020) 168252
29. Rotating black string in dRGT massive gravity
By Sushant G. Ghosh, Rahul Kumar, Lunchakorn Tannukij, Pitayuth Wongjun.
Phys.Rev. D101 (2020) no.10, 104042.
30. Thermodynamics of rotating Bardeen black holes: Phase transitions and thermodynamics
By Md Sabir Ali, Sushant G. Ghosh.
Phys.Rev. D99 (2019) no.2, 024015.
31. Black hole parameters estimation from its shadow
By Rahul Kumar, Sushant G. Ghosh.
Astrophys.J. (2020), no 2, 894
32. Exact d -dimensional Bardeen-de Sitter black holes and thermodynamics
By Md.Sabir Ali, Sushant G. Ghosh.
Phys.Rev. D98 (2018) no.8, 084025.
33. d -dimensional Bardeen-AdS black holes in Einstein-Gauss-Bonnet theory
By Arun Kumar, Dharm Veer Singh, Sushant G. Ghosh.
Eur.Phys.J. C79 (2019) no.3, 275
34. Vaidya Collapse with Nonzero Radial Pressure
By A. Beesham, S.G. Ghosh.
J.Phys.Conf.Ser. 1051 (2018) no.1, 012005.
35. Regular black holes in Einstein-Gauss-Bonnet gravity
By Sushant G. Ghosh, Dharm Veer Singh, Sunil D. Maharaj.
Phys.Rev. D97 (2018) no.10, 104050.
36. Particle acceleration of two general particles in the background of rotating $Ay^{\{o\}}n$ -Beato-Garc $\{i\}$ a black holes
By Fazlay Ahmed, Muhammed Amir, Sushant G. Ghosh.
Astrophys.Space Sci. 364 (2019) no.1, 10
37. Rotating black hole shadow in Rastall theory
By Rahul Kumar, Balendra Pratap Singh, Md Sabir Ali, Sushant G. Ghosh.
arXiv:1712.09793 [gr-qc] Submitted Ann. Phys.
38. Rotating black hole in Rastall theory
By Rahul Kumar, Sushant G. Ghosh.
Eur.Phys.J. C78 (2018) no.9, 750

39. Lovelock black holes surrounded by quintessence
By Sushant G. Ghosh, Sunil D. Maharaj, Dharmanand Baboolal, Tae-Hun Lee.
Eur.Phys.J. C78 (2018) no.2, 90.
40. Shadows of rotating five-dimensional EMCS black holes
By Muhammed Amir, Balendra Pratap Singh, Sushant G. Ghosh.
Eur.Phys.J. C78 (2018) no.5, 399
41. Noncommutative geometry inspired rotating black string
By Dharm Veer Singh, Md Sabir Ali, Sushant G. Ghosh.
Int.J.Mod.Phys. D27 (2018) 1850108
42. Noncommutative geometry inspired Einstein-Gauss-Bonnet black holes
By Sushant G. Ghosh.
Class.Quant.Grav. 35 (2018) no.8, 085008
43. Shadow of Schwarzschild-Tangherlini black holes
By Balendra Pratap Singh, Sushant G. Ghosh.
Annals Phys. 395 (2018) 127-137
44. Accretion onto a noncommutative geometry inspired black hole
By Rahul Kumar, Sushant G. Ghosh.
Eur.Phys.J. C77 (2017)
45. Black String in dRGT Massive Gravity
By Lunchakorn Tannukij, Pitayuth Wongjun, Sushant G. Ghosh.
Eur.Phys.J. C77 (2017) no.12, 846
46. Quintessence background for 5D Einstein–Gauss–Bonnet black holes
By Sushant G. Ghosh, Muhammed Amir, Sunil D. Maharaj.
Eur.Phys.J. C77 (2017) no.8, 530.
47. Collision of two general particles around a rotating regular Hayward's black holes
By Muhammed Amir, Fazlay Ahmed, Sushant G. Ghosh.
Eur.Phys.J. C76 (2016) no.10, 532.
48. Shadow of rotating regular black holes
By Ahmadjon Abdujabbarov, Muhammed Amir, Bobomurat Ahmedov, Sushant G. Ghosh.
Phys.Rev. D93 (2016) no.10, 104004.
49. Shapes of rotating nonsingular black hole shadows
By Muhammed Amir, Sushant G. Ghosh.
Phys.Rev. D94 (2016) no.2, 024054.
50. Rotating black hole and quintessence
By Sushant G. Ghosh.
Eur.Phys.J. C76 (2016) no.4, 222.
51. Lovelock black hole thermodynamics in a string cloud model
By Tae-Hun Lee, Sushant G. Ghosh, Sunil D. Maharaj, Dharmanand Baboolal.
arXiv:1511.03976 [gr-qc]. Under Review
52. A class of black holes in dRGT massive gravity and their thermodynamical properties
By Sushant G. Ghosh, Lunchakorn Tannukij, Pitayuth Wongjun.
Eur.Phys.J. C, 76(3), 1-15 (2016).
53. Horizon structure of rotating Bardeen black hole and particle acceleration
By Sushant G. Ghosh, Muhammed Amir.
Eur.Phys.J. C75 (2015) 11, 553.

54. Horizon structure of rotating Einstein-Born-Infeld black holes and shadow
By FarruhAtamurotov, Sushant G. Ghosh, BobomuratAhmedov.
Eur.Phys.J. C75 (2015) no.11, 553
55. Rotating Hayward's regular black hole as particle accelerator
By Muhammed Amir, Sushant G. Ghosh.
JHEP 1507 (2015) 015.
56. Radiating Kerr-like regular black hole
By Sushant G. Ghosh, Sunil D. Maharaj.
Eur.Phys.J. C75 (2015) 7.
57. Lovelock black holes in a string cloud background
By Tae-Hun Lee, DharmanandBaboolal, Sushant G. Ghosh.
Eur.Phys.J. C75 (2015) 7, 297.
58. A nonsingular rotating black hole
By Sushant G. Ghosh.
Eur.Phys.J. C75 (2015) 11, 532.
59. Rotating Ayón-Beato-García black hole as a particle accelerator
By Sushant G. Ghosh, Pankaj Sheoran, Muhammed Amir.
Phys.Rev. D90 (2014) 10, 103006.
60. Cloud of strings for radiating black holes in Lovelock gravity
By Sushant G. Ghosh, Sunil D. Maharaj.
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INVITED TALKS AND CONFERENCE/MEETINGS ATTENDED (LAST FIVE YEARS)

1. SUSHANT G GHOSH visited University of KwazuluNatal, Durban , South Africa 16/05/2019 -- 15/06/2019.
Delivered the course on "GRTensor in Maple" in Workshop South Cost, Durban
2. SUSHANT G GHOSH visited Sixteen universities in USA as Fulbright Fellow, USA 20/10/2018 -- 03/11/2018.
Delivered the invited talk "Fund raising in the universities"
3. SUSHANT G GHOSH visited BITS, Pilani, Pilani, India 1/3/2019 -- 2/3/2019.
Delivered the talk "Black hole shadow"
4. SUSHANT G GHOSH visited University of KwazuluNatal, Durban , South Africa 04/01/2018 -- 03/02/2018.
Delivered the invited talk "Black hole shadow"
5. SUSHANT G GHOSH visited University of Virginia, charlottesville, Virginia - to attend MHRD - LEAP, USA 22/03/2019 -- 31/03/2019.
6. Sushant G Ghosh attended ICGCAMP 2019 @ GLA UNIVERSITY, MATHURA, INDIA 04/04/2019 -- 07/04/2019.
Delivered the invited talk "Plenary talk on "A quest for black hole shadow""
7. SUSHANT G. GHOSH attended A workshop on gravity, Brahman Hills, Nottingham Road, South Africa 29/06/2017 -- 03/07/2017.
8. Sushant G Ghosh attended International Symposium "New Tendencies of Developing Fundamental and Applied Physics: Problems, Achievements and Perspectives", Tashkent, Uzbekistan 10/11/2017 -- 11/11/2017. Delivered the invited talk "Black holes with regular centre and Chaired a session"
9. Sushant G Ghosh attended Recent Developments in Gravity, Drakensberg, RSA 13/04/2017 -- 16/04/2017. Delivered the invited talk "Non-commutative inspired black holes and also chaired sessions"
10. Sushant G Ghosh visited University of Kwa-Zulu Natal Durban, Durban, RSA 31/3/2017 -- 3/5/2017. Delivered the talk "Regular black holes"
11. Delivered the invited talk "A quest for a black hole's shadow" Sushant G Ghosh attended Trends and Challenges in Astronomy and Astrophysics, Kolkata, India 10/09/2015 -- 15/09/2015. Delivered the talk "Regular black holes"
12. Sushant G Ghosh attended South African Garvity Society Meeting, Grahamstown, South Africa 30/08/2015 -- 02/09/15. Delivered the talk "Black hole with regular centre"
13. Sushant G Ghosh visited IUCAA, Pune, India 17/03/2016 -- 29/03/2016.
14. SUSHANT G GHOSH visited IUCAA, PUNE, INDIA 01/06/16 -- 30/06/16. Delivered the talk "SPINNING BLACK HOLES"
15. Sushant G Ghosh attended ANALYSIS AND DIFFERENTIAL EQUATIONS WITH APPLICATIONS TO NATURAL SCIENCES, Salt Rock, Durban, South Africa 12/07/2015 -- 15/07/2015.
16. Sushant G Ghosh visited University of Kwa-Zulu-Natal, Durban, South Africa 05/07/2015 -- 03/09/2015. Delivered the talk "Rotating regular black holes"
17. Sushant G Ghosh visited IUCAA, Pune, India 29/05/15 -- 25/06/15.
18. Sushant G Ghosh attended Analysis and Differential Equations with Applications to Natural Sciences, Salt Rock, Balito, South Africa 12/07/15 -- 16/07/15.
19. Sushant G Ghosh visited Institute for Fundamental Studies, Thailand 07/01/2015 -- 05/01/2015. Delivered 9 Lectures Course on Black Holes Physics
20. Sushant G Ghosh attended Institute for Fundamental Studies, Thailand 07/01/2015 -- 21/01/2015. Delivered the talk "Regular Black Holes"
21. Sushant G Ghosh visited IUCAA, Pune, India 26/12/2014 -- 05/01/2015.
22. Sushant G Ghosh attended Institute of Nuclear Physics of Republic Uzbekistan AS, Tashkent, Uzbekistan 11/11/14 -- 11/11/14.
23. Sushant G Ghosh attended Ulugh Beg Astronomical Institute , Tashkent, Uzbekistan 10/11/14 -- 21/11/14.
24. Sushant G Ghosh visited Unversity of KwaZulu-Natal, Durban, South Africa 10/05/2014 -- 29/07/2014.

25. Sushant G Ghosh attended GWPAAW @IUCAA, Pune, PUNE, INDIA17/12/2013 -- 21/12/2013.
26. Sushant G Ghosh visited Ulugh Beg Astronomical Institute , Tashkent, Uzbekistan15/11/2013 -- 28/11/2013.
27. Delivered the talk "Gravitational collapse in lovelock gravity"Sushant G Ghosh visited Institute of Nuclear Physics, Tashkent, Uzbekistan15/11/2013 -- 28/11/2013.
28. Delivered the talk "Spinning black holes"Sushant G Ghosh visited BITS, Pilani - Dubai campus, UAE28/10/11 -- 29/10/11.
29. Delivered the talk "Final fate of massive star"Sushant G Ghosh visited Rhodes University, Grahamstown, South Africa22/09/2013 -- 23/09/2013.
30. Delivered the talk "Gravitational collapse in Lovelock gravity"Sushant G Ghosh attended Conference in honour of Prof GL Nongxa, University of Forte Hare, Alice, South Africa20/09/2013 -- 21/09/2013.
31. Sushant G Ghosh visited University of Kwa-Zulu-Natal, Durban, South Africa03/08/2013 -- 28/10/2013.
32. Sushant G Ghosh attended SAGS 2013, , at Salt-Rock, Balito, Durban, South Africa08/08/2011 -- 11/08/2011. Delivered the talk "Gravitational Collapse In Einstein-Gauss-Bonnet gravity"
33. Sushant G Ghosh attended Meeting: Jayan@75 at IUCAA Pune Chaired Session, Pune, India18/07/2013 -- 19/07/2013.
34. Sushant G Ghosh visited Inter University centre for Astronomy and Astrophysics,(INDIA25/05/2013 -- 28/06/2013.
35. Sushant Ghosh visited Inter-University Centre for Astronomy and Astrophysics (IUCAA), Pune, India04/07/12 -- 15/07/12.
36. Sushant Ghosh attended ASSOCIATE-FEST AT IUCAA, Pune, India24/06/2012 -- 28/06/2012. Delivered the talk "Gravitational Collapse in Einstein-Gauss-Bonnet Gravity"
37. Sushant Ghosh visited Durban University of Technology, Durban, Durban, South AfricaMarch 06 – 2012Delivered the talk "Final Fate of Massive Collapsing Star"
38. Sushant Ghosh visited University of Zululand, Kwadalegwa, South Africa16/03/2012 -- 16/03/2012. Delivered the talk "What happens when a massive star dies?"
39. Sushant Ghosh attended SDEA2012 at WITS University, Johannesburg, South Africa23/01/2012 -- 25/01/2012. Delivered the talk "Gravitational Collapse in Self-Similar Space-time"
40. Sushant Ghosh visited University of Kwa-Zulu-Natal, Durban, Durban, South AfricaJanuary 01, 2012 -- March 31, 2012. Delivered the talk "Spherical Collapse in Einstein-Gauss-Bonnet Gravity"
41. Sushant Ghosh attended ICGC-2011 Goa , India14/12/2011 -- 19/12/2011.
42. Sushant Ghosh attended Chandrayana 2011 conference at IMSc, Chennai, Chennai, India03/01/2011 -- 07/01/2011.
43. Sushant Ghosh attended IRC Coordinaters' meeting at IUCAA, Pune, India03/08/11 -- 05/08/11.
44. DCATTP* Module I Programming and Programming Methodology
V.A.Sarabhai Community Science Centre, Ahmedabad -6 weeks
45. DCATTP Module III, Computer Oriented Mathematical Methods
Delhi University, New Delhi -6 weeks
46. DCATTP Module IV Data Processing Techniques, TTTI, Salt Lake City, Calcutta-6 weeks
47. Orientation Programme for College Teachers, Department of Mathematics Nagpur University-4 Weeks
48. A Certificate Course in Fortran, Department of Applied Mechanics, VRCE-6 weeks
49. Computer based Numerical Algorithm with Engg. Applications
Department of Mathematics I.I.T. , Kharagpur – 2 Weeks
50. Refresher Course on Astronomy and Astrophysics, IUCAA, Pune - 4 Weeks
51. Refresher Course in Mathematics, Nagpur University, Nagpur - 4 Weeks, India
52. XI Annual Conference of Ramanujan Mathematical Society, MACT, Bhopal, India

53. IX SAMS Congress, University of Western Cape, Capetown, SouthAfrica
54. XI Kwa-Zulu Natal Maths Conference, University of Natal, Durban, South Africa
55. ICGC-2000 Indian Institute Technology, Kharagpur, India
56. Refresher Course in Mathematics, Nagpur University, Nagpur, India- 4 Weeks
57. Discussion Conference in Gravitational Collapse Nagpur University, Nagpur, India - 3 days
58. Workshop on Topics in General Relativity, IUCAA, Pune - 9 days
59. Discussion conference on Cosmology, CIRI, Nagpur, - 2 days
60. 21st Meeting of IAGRG – 2001, CIRI, Nagpur - 3 days
61. National Symposium on Mathematical Physics, Nagpur, University - 5 days
62. GR-16, University of Natal, Durban South Africa – 6days – 2001
63. 2-Day Meeting on General Relativity and Cosmology
Natal Technikon, Durban South Africa – 2days
64. Work-Shop on Numerical Relativity, IUCAA, Pune - 06 days
65. Work-Shop on Numerical Relativity, IUCAA, Pune - 06 days
66. Work-Shop on Gravity and Astrophysics, Science College, Congress Nagar, Nagpur – 4 days
67. 22nd Meeting of IAGRG – 2002, IUCAA, Pune - 5 days
68. Conference on GR and prospects of singularity, SFS college, Nagpur - 2 days,
69. 22nd Meeting of IAGRG – 2002, Jamia Milia Islamia – New Delhi – 4 days

Names of three references to whom reference could be made

Sr. No.	Name	Email ID & Contact Number
1.	Prof Jayant V. Narlikar, Padma Vibhushan, Inter-University Centre for Astron and Astrophysics, IUCAA Post Bag 4 Ganeshkhind Pune 411 007 Maharashtra, India	jvn@iucaa.in
2.	Prof Talat Ahmed, FNA; FASc; FNASc, J.C. Bose National Fellow Vice Chancellor, Kashmir University, Srinagar	tahmad001@yahoo.co.in, tahmad001@gmail.com
3.	Prof Sunil D Maharaj FRSSAF; MASSAF Senior Professor Head of the Astrophysics and Cosmology Research Unit University of KwaZulu-Natal University Road Westville 4001 South Africa	maharaj@ukzn.ac.za

I solemnly declare that all the information furnished in this document is free of errors to the best of my knowledge.



(Sushant G Ghosh)