




Shivaji College Faculty Details Proforma

Title	First Name	Last Name	Phot
Dr.	Abdullah		
Designation	Assistant Professor		
Address	G-12/316,Ratiya Marg, Sangam Vihar, New Delhi-110062		
Office Phone No.			
Residence			
Mobile	8527343960		
Email	abdullah2008@rediffmail.com		
Web-Page			
Educational Qualifications	Ph. D. (Mathematics)		
Degree	University/Institute		
Ph.D.	Jamia Millia Islamia, New Delhi	2009	
M.Sc.	University of Delhi	2004	
B.Sc.(Hons)	Aligarh Muslim University	2002	
	Career Profile		

Shivaji College, October 2021 to present, Ad-hoc Assistant Professor.

Administrative Assignments

Areas of Interest/Specialisation

Applied Mathematics (Celestial Mechanics)

Subjects Taught

Applied Mathematics for Engineering, Differential Equation, Calculus, several variables, Introduction to geometry, Vector Calculus

Innovation Project/Research Projects (Major Grants/Research Collaboration)

- 1. The Robe's problem with viscous force. (2018-2019)**
Awarded by The Deanship of Scientific Research, Majmaah University, Kingdom of Saudi Arabia.
- 2. Locations and stability of the libration points in the CR3BP under perturbations. (2017-2018)**
Awarded by The Deanship of Scientific Research, Majmaah University, Kingdom of Saudi Arabia.
- 3. Non-linear stability of L_4 in the R3BP when the smaller primary is a heterogeneous triaxial rigid body with N layers. (2016-2017)**
Awarded by The Deanship of Scientific Research, Majmaah University, Kingdom of Saudi Arabia.
- 4. Investigation of a family of simply periodic orbits around the Mars. (2015--2016)**
Awarded by The Deanship of Scientific Research, Majmaah University, Kingdom of Saudi Arabia.

Publications Profile (Research Papers/Books)

Abdullah: Analysis of parking points within the frame of perturbed elliptic problem of three bodies, *Romanian Astronomical Journal*, 31(3), 275-291, 2021.

Abdullah & E. I. Abouelmagd: Variable mass motion in the Henon-Heiles system, *Physics Letters A*, 36(21), DOI: 10.1142/S0217732321501509, 2021.

Abdullah: Heterogeneous primary in the restricted three-body problem with Newtonian potential of secondary, *Bulgarian Astronomical Journal*, 35, 2021.

F. Bouaziz & **Abdullah:** Perturbed Hill's problem with variable mass, *Astronomical Journal*, 2021, 1-9. <https://doi.org/10.1002/asna.202113870>.

Abdullah & Rabah Kellil: Dynamical behaviour of motion of small oblate primary in the generalized elliptic restricted 3-body problem with variable mass, *Romanian Astronomical Journal*, 31(1), 81-100, 2021.

Abdullah, Mehtab Alam, Kalu Ram Meena & Ashraf Ali: Properties of motion of infinitesimal variable mass body in the well known circular restricted three-body problem with Newtonian and Yukawa potential, *Appl. Math. Inf. Sci.*, 15(2), 189-195, 2020.

Abdullah, Sada Nand Prasad & Chaman Singh: Vertical motion of the infinitesimal mass in the circular Sitnikov problem, *Application and Applied Mechanics*, 15(2), 1350-1361, 2020.

E. I. Abouelmagd, **Abdullah**, M. S. Ullah & J. L. G. Guirao: A planar five-body problem in a framework of heterogeneous and mass variation effects, *Astronomical Journal*, 2020.

E. I. Abouelmagd, **Abdullah** & S. H. Shehata: On Robe's restricted problem with Newtonian potential, *International Journal of Geometric Methods in Modern Physics*, <https://doi.org/10.1142/S0219887821500055>, 2020.

Abdullah, K. R. Meena & Sada Nand Prasad: Perturbed six-body configuration with variable mass, *Romanian Astronomical Journal*, 30 (2), 135–152, 2020.

Abdullah: Kind of Robe's restricted problem with heterogeneous irregular primary of N-layers when outer most layer has viscous fluid, *New Astronomical Journal*, <https://doi.org/10.1016/j.newast.2020.101496>, 2020.

Abdullah & Sada Nand Prasad: Generalized elliptic restricted four-body problem with variable mass, *Astronomy Letters*, 46(4), 275-288, 2020.

Abdullah, L. Narain & Sada Nand Prasad: The motion properties of the variable mass primary in the restricted three-body problem, *Astronomy Letters*, 46(4), 275-288, 2020.

planetoid in the elliptical Sitnikov problem, *GEDRAG & ORGANISATIE REVIEW*, 398-405, 2020.

Sada Nand Prasad, L. M. Saha & **Abdullah**: Chaos measure in Autonomous Model, *GEDRAG & ORGANISATIE REVIEW*, 33(02), 2687-2694, 2020. <http://tijdschriften.com>.

Abdullah: Behaviour of small variable mass particle in electromagnetic Coupled problem, *Sultan Qaboos University Journal for Science*, 25(1), 61-77, 2020.

Abdullah & E. I. Abouelmagd: Gravitational potential formulae between two finite dimensions, *Astronomical Notes*, 2020. DOI : 10.1002/asna.202013726.

Sada Nand Prasad, K. R. Meena & **Abdullah**: Complexity Dynamics of Gumowski-Mozes Map, *Applications and Applied Mathematics : An International Journal*, 15(1), 273-280, 2020.

Abdullah, Sada Nand Prasad & Mehtab Alam: Variable mass of a test particle in the Copenhagen problem with Manev-type potential, *Research and review journal of Physics*, 9(1), 17-27, 2020.

Abdullah, Ashraf Ali, Mehtab Alam & Rabah Kellil: Cyclic kite configurations in the restricted five-body problem with variable mass, *Applications and Applied Mathematics International Journal*, 14(2), 985-1002, 2019.

Abdullah, Kumari Shalini, Mehtab Alam & A. Ali: Heterogeneous primaries in the restricted three-body problem, *International Journal of Advanced Astronomy*, 7(2), 49-56, 2019.

E. I. Abouelmagd & **Abdullah**: The motion properties of the infinitesimal body in the framework of bicircular Sun-perturbed Earth-Moon system, *New Astronomy*, 87, 101577, 2019.

Abdullah, Jagdish Singh, Z. Alhussain & H. Belmabrouk: Effect of oblateness force in the Robe's circular restricted three-body problem, *New Astronomy*, 87, 101577, 2019.

Abdullah, Jagdish Singh, Z. Alhussain & H. Belmabrouk: Perturbed Robe's Circular Restricted Three-Body Problem with Viscous Force, *Astrophysics and Space Science*, 364, 95, 2019.

Abdullah, Rabah Kellil, Z. Alhussain & W. Haq: Effect of charge in the circular restricted three-body problem with variable masses, *Journal of Taibah University for Science*, 11(6), 670-677, 2019.

Abdullah & Z. Alhussain: The restricted five-body problem with

configuration, *Journal of Dynamical Systems and Geometric Theories*, 17(1), 91-107,

Abdullah, P. Kumar & M. Alam: Heterogeneous Oblate Primaries in Photo-gravitational CR5BP with Kite Configuration, *Journal of Nepal Mathematical Society*, 2(1), 1-14

Abdullah, Rabah Kellil & Z. Alhussain: Behavior of an infinitesimal-variable in CR3BP; the primaries are finite straight segments, *Punjab University Mathematics*, 51(5), 107-120, 2019.

Abdullah, K. Shalini & Z. Alhussain: Non-linear stability of L_4 in the R3BP of a smaller primary is a heterogeneous triaxial rigid body with N layers, *Italian Journal of Pure and Applied Mathematics*, 41, 297-312, 2019.

Abdullah: The circular restricted four-body problem with triaxial primaries and an infinitesimal mass, *Applications and Applied Mathematics : An International Journal*, 13(7), 818-838, 2018.

Abdullah, Z. Alhussain & S. N. Prasad: The circular restricted three-body problem with both the primaries as heterogeneous spheroids of three layers and an infinitesimal body varies its mass, *Journal Of Astrophysics and Astronomy*, 39, 57, 2018.

Abdullah: Investigation of the effect of albedo and oblateness on the circular restricted four variable bodies problem, *Applied Mathematics and Nonlinear Sciences*, 2(2), 2017.

Abdullah: Effect of Albedo on the motion of the infinitesimal body in circular restricted three-body problem with variable masses, *Italian Journal Of Pure and Applied Mathematics*, 38, 581-600, 2017.

Abdullah: Investigation of a family of simply periodic orbits around the non-spherical Mars, *Sci.Int.(Lahore)*, 29(5), 1161-1171, 2017.

Abdullah, R. Kellil & Z. Alhussain: Locations and stability of the libration points in CR3BP with perturbations, *Journal of Mathematical Analysis*, URL : www.ilirias.ac.rs, (5) 131-144, 2017.

Abdullah, Rabah Kellil & Z. Alhussain: The effect of perturbations on the circular restricted four-body problem with variable masses, *Journal of Mathematics and Physics Science*, 17 (3), 365-377, 2017.

Abdullah & Rabah Kellil: The circular restricted four-body problem with variable masses, *Nonlinear Sci. Lett. A*, 8(3), 303-312, 2017.

Abdullah & Mehtab Alam: Dynamics in the circular restricted three-body problem

perturbations, *International Journal of Advanced Astronomy*, 5(1), 19-25, 2017.

Abdullah & Rabah Kellil: Periodic motion of Martian moon's satellite. *Nonlinear Dynamics*, 8(2), 171-177, 2017.

Abdullah: The Photogravitational Circular Restricted Four-body Problem with unequal Masses, *Journal of Engineering and Applied Sciences*, 3(2), 2016.

Abdullah: Restricted Problem of (2+2) bodies where oblate primary and secondary magnetic dipoles and infinitesimal bodies are electric dipoles, *International Journal of Science and Research*, 3, Issue 4(5), 546-549, 2014, ISSN (Online) : 2319-7064.

Abdullah: Periodic orbits around Lagrangian points of the circular restricted three-body problem, *Invertis Journal of Science and Technology*, 7(1), 29-38, Jan- March, 2014.

Conference/Seminar/Faculty Development Programme/Workshop

1. 4th Conference on Mathematical Sciences and Applications, King Saud University, Riyadh, Saudi Arabia, April (11-12), 2018.
2. Workshop Cum training programme on Modern Trends in Celestial Mechanics and Astronomy, University of Delhi, Delhi, India, March (17-19), 2010.
3. International Conference on recent trends in Mathematics and its Applications (ICRTMA-09), Jamia Millia Islamia, New Delhi, India, March (30-31), 2009.

Research Guidance (Supervision of Graduate students)

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| 1. | <ol style="list-style-type: none"> 2. 2018—2019, First term, Behaviour of infinitesimal body in the restricted three-body problem: Abdul Hamid Al-Odhayb, Ahmed Al-Badair 3. 2017—2018, Second Term, Applications of Mathematica in Mathematics: Yousuf Al-Mutairi. 4. 2016- 2017, Second Term, Stationary Solutions of the three-body problem: Fawaz Muhammad Al-Hammadi, Abdul Majeed ThaarAlsuayani. 5. 2016—2017, First Term, Dynamics in the restricted problem with perturbations: Abdul Aziz Mohsen Al-Mousa, Abdul Aziz Saler Rashidi & Muhammad Abdul Aziz Al-Shaya. 6. 2015—2016, First Term, Robe's restricted problem: Muhammad Dakhil Abdul Aziz. 7. 2014—2015, First Term, Dynamics in the restricted three-body problem: Muhammad Zaal Alharbi. |
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Awards and Distinctions

Memberships

- 1.
2. **Guest Editor:Special Issue in Advances in Astronomy: Recent Trends in Celestial Mechanics,**
<https://www.hindawi.com/journals/aa/si/628674/cfp/>.
3. **Editor:International Annals of Science.**
4. **Reviewer:**
 - a. **Italian Journal of Pure and Applied Mathematics.**
 - b. **Astrophysics and Space Science.**
 - c. **International Journal of Non-Linear Mechanics.**
 - d. **Indian Journal of Physics.**
 - e. **Applications and Applied Mathematics : An Inter. Journal**
 - f. **Journal of Taibaah University for Science.**
 - g. **International Annals of Science.**
 - h. **International Journal of Interdisciplinary Science.**
 - i. **International Journal of Astronomy and Astrophysics.**

Other Academic Activities

NCC-B

Cultural/Extracurricular Activities

Signature of Faculty Member