

أ.د سونيل كومار ماوريا

مساعد العميد للدراسات العليا والبحث العلمي، أستاذ دكتور

مكتب العميد، العلوم الرياضية والفيزيائية ـ شعبة الرياضيات

كلية العلوم والآداب

جامعة نزوى، سلطنة عمان

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موقع المكتب: 5D-5A

الحالة الاجتماعية: ...

حصل على درجة الدكتوراه في الرياضيات في عام 2013 م ، من جامعة المعهد الهندي للتكنلوجيا رووركي في الهند ، وعلى درجة الماجستير في الرياضيات في عام2008م، من جامعة B.H.U(الهند) ، كما حصل على درجة بكالوريوس علوم في ..الرياضيات و الفيزياء في عام 2006 من جامعة لوكناو (الهند) أما اهتماماته البحثية فتقع في المعادلات التفاضلية و النسبية العامة و علم الكون و التحويلات المتماثلة

Dr- Sunil UoN CV.pdf

المؤهلات الأكاديمية

Ph.D، IIT Roorkee، 2013

أنشطة التدريس

Engineering Mathematics-I، Differential Calculus, Integral Calculus, Ordinary differential equations and Fourier series

.Engineering Mathematics-III:، Matrix, Vector space and Complex analysis

Calculus-II، hyperbolic, inverse trigonometric functions, techniques of integration, Applications of integration (volumes, surfaces, arc-length), the definite integral, sequences and series, Taylor .polynomials and approximation

Calculus-I، Limits, Differentiation, Integrations

Precalculus

Differential Equations

Mathematical Economics : ، derivatives and optimization techniques for functions, basic techniques of integration, definite integrals. The emphasis is placed on applications of derivatives .and integrals to various problems from business, economics and finance

Foundation of Mathematics، Logic and proofs, Sets, Relations, Equivalence Relations, Functions .and Cardinality

Foundation of Analysis، : field axioms, ordered axioms, Supremum and Infimum, Completeness of , Properties of Supremum and Infimum (Proofs of Uniqueness, Approximation, Monotonicity, and Additive Properties, and other properties) , and Archimedean property of real numbers; The dense set. The sets of rational numbers and of irrational numbers are dens in the set of real numbers

Introduction to Number theory، integers, divisibility, primes and their distribution, the theory of congruences, Fermat`s and Euler theorems, and applications

Mathematical Economics for Masters، statics (equilibrium analysis), comparative statics, and optimization problems and dynamics, making use of the following mathematical methods: differential and integral calculus (advanced calculus), dynamic optimization, linear programming and differential equations. They will be able to select and apply appropriate techniques to solve .problems apply mathematical and graphical techniques in an appropriate manner

Engineering Mathematics-II:، Vector calculus, Partial Differential Equations and Laplace transforms

الأنشطة البحثية

الاهتمامات البحثية ـ

Modelling of compact stars, Astronomy & Astrophysics

Differential Equations

General Relativity and Cosmology

Exact solution of Einstein-field Equations

المنشورات ـ

مقال:

1. A generalized family of anisotropic compact object in general relativity، Annals of Physics 2019 395 (2018) 152–169

2. Charged anisotropic strange stars in general relativity، Eur. Phys. J. C (2019) 79:33 2019

3. A study on charged compact stars، International Journal of Modern Physics D, Vol. 28 2019 ((2019) 1950053 (19 pages

4. Generalized relativistic anisotropic compact star models by gravitational decoupling، Eur. 2019 Phys. J. C (2019) 79:85

5. Anisotropic compact stars in the Buchdahl model: A comprehensive study، PHYSICAL 2019 (REVIEW D 99, 044029 (2019

6. Generalized anisotropic models for conformal symmetry، Eur. Phys. J. C (2019) 79:170 2019

7. Exploring physical features of anisotropic strange stars beyond standard maximum mass 2019 limit in f (R, T) gravity، Monthly Notices of the Royal Astronomical Society, Volume 485, Issue 4,

June 2019, page: 5652–5665

Relativisticmodel for anisotropic compact stars using Karmarkar condition, Astrophys 2019 .8
Space Sci (2019) 364:66

A generalized Finch–Skea class one static solution, Eur. Phys. J. C (2019) 79:381 2019 .9

A study of anisotropic compact stars based on embedding class 1 condition, 2019 .10
(International Journal of Modern Physics D, Vol. 28 (2019) 1950116 (19 pages

Effect of pressure anisotropy on Buchdahl-type relativistic compact stars, General 2019 .11
Relativity and Gravitation (2019) 51:86

Study of anisotropic strange stars in f (R;T) gravity: An embedding approach under the 2019 .12
simplest linear functional of the matter-geometry coupling, PHYSICAL REVIEW D 100, 044014
((2019

Role of pressure anisotropy on relativistic compact stars, PHYSICAL REVIEW D 97, 2018 .13
(044022 (2018

Relativistic compact stars with charged anisotropic matter, Chinese Physics C Vol. 42, 2018 .14
No. 5 (2018) 055101

New anisotropic fluid spheres from embedding, Eur. Phys. J. A (2018) 54: 68 2018 .15

Charged Vaidya–Tikekar model for super compact star, Eur. Phys. J. C (2018) 78:540 2018 .16

A generalized family of anisotropic compact object in general relativity, Annals of 2018 .17
Physics 395 (2018) 152–169

Exact solution of anisotropic compact stars via mass function, Astrophys Space Sci 2018 .18
(2018) 363:208

A new model for spherically symmetric charged compact stars of embedding class 1, 2017 .19
Eur. Phys. J. C (2017) 77:45

Anisotropic stars for spherically symmetric spacetimes satisfying the Karmarkar 2017 .20
condition, Annals of Physics 382 (2017) 36–49

Relativistic modeling of compact stars for anisotropic matter distribution, Eur. Phys. J. A 2017 .21
(2017) 53: 89

Anisotropic fluid spheres of embedding class one using Karmarkar condition, Eur. Phys. J. 2017 .22
C (2017) 77:328

Generating physically realizable stellar structures via embedding, Eur. Phys. J. C (2017) 2017 .23
77:347

All spherically symmetric charged anisotropic solutions for compact stars, Eur. Phys. J. C 2017 .24
(2017) 77:360

Generating physically realizable stellar structures via embedding, Eur. Phys. J. C (2017) 2017 .25
77:347

All spherically symmetric charged anisotropic solutions for compact stars, Eur. Phys. J. C 2017 .26
(2017) 77:360

A family of charged compact objects with anisotropic pressure, Eur. Phys. J. C (2017) 2017 .27
77:420

Modeling of charged anisotropic compact stars in general relativity, Eur. Phys. J. A 2017 .28
(2017) 53: 141

Compact stars with specific mass function, Annals of Physics 385 (2017) 532–545 2017 .29

Generalised model for anisotropic compact stars, Eur. Phys. J. C (2016) 76:693 2016 .30

العضوية في الهيئات المهنية

2014–الآن: Editorial Board Member of the International Journal of Modern Physics and Application.

2014–الآن: Member of International Association of Computer Science and Information Technology ((IACSIT

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المرجع: https://www.unizwa.edu.om/staff/cas/sunil