# Dr Tanuja A.

Affiliation (Assistant Professor, Dept of Mathematics, SIT)

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# Education

	Degree	Year	Institute	Specialization
1	PhD	2015	Bangalore University	Complex Analysis
2	MSc	2008	Government Science college, Bengaluru	Mathematics
3	BSc	2006	Maharani's Science College for women, Bengaluru	Physics, Chemistry, Mathematics

# Professional Experience

SL No.	Date (from-to)	Designation	Organization
1	22-07-2017 to till date	Assistant Professor	Siddaganga Institute of Technology
2	22-4-2015 to 1-7-2017	P.G. Co-ordinator & Assistant Professor in P.G. Department of Mathematics	K.L.E. S Nijalingappa College
3	1-3-2012 to 1-3-2015	Lecturer in P.G. Department of Mathematics	Acharya Institute of Graduate Studies
4	1-3-2011 to 17-1-2012	Lecturer in P.G. Department of Mathematics	M.E.S. Degree College
5	1-8-2008 to 17-1-2011	Lecturer in Department of Mathematics	S.S.M.R.V. Degree College

(Please fill in reverse order. Current designation should be at the top)

# Positions held

(Please give details of any administrative posts, co Ordinator roles/ responsibilities held)

### Affiliations of Professional organizations

- Life Member of Indian Mathematical Society from 2009 onwards.
- International Scientific Committee member of Mathematical and Computational Sciences in World Academy of Science, Engineering and Technology.

#### Awards and Honors

- The Student Award of Excellent Presentation for a paper entitled "Analytic solution of the complex Ginzburg-Landau equation arising in fluid dynamics problems" in International Conference of FIM-IMIPUMSO2021 held at Kitakyushu (City), Japan on December 26th -28th, 2021.
- Best research paper award for a paper entitled "Nevanlinna method of obtaining solution of a system of q-shift complex differential-difference equations" in the conference on "Recent Trends in Mathematics and its Applications (NCRTMA-2019)" held on December 20-21, 2019 at GITAM, Bengaluru.

## Courses Taught

**Undergraduate Courses** 

- B.Sc Mathematics
- B. E. Mathematics

Postgraduate Courses

M.Sc Mathematics

#### Research Guidance: NIL

SI.	Name of the	Title	Year of
no	Scholar		completion

#### Research Areas

Nevanlinna Theory

# Sponsored Projects: NIL

#### **Ongoing Projects:**

1. Title:

Funding Agency:

Amount:

Duration:

Role:

2. Title:

**Funding Agency:** 

Amount:

Duration:

Role:

### Completed Projects:

1. Title:

Funding Agency:

Amount:

Duration:

Role:

2. Title:

**Funding Agency:** 

Amount:

Duration:

Role:

### **Publications**

#### Journals

- "Nevanlinna method of obtaining solution of a system of q-shift complex differential-difference equations", Poincare Journal of Analysis & Applications, Vol. 9, No. 2, (2022), 201-212.
- "Weighted sharing results for meromorphic function concerning q-shift differential-difference polynomials", International Journal of open Problems in Complex Analysis, Vol. 13, No. 1, (2021), 1-11.
- "Nevanlinna theory for existence of meromorphic solution to StuartLandau equation" Springer Lecture Notes in Mechanical Engineering (2020), 373-379.

- "Nevanlinna theory for finding meromorphic solutions of cubic-quintic Ginzburg-Landau equation arising in nonlinear dynamics" Springer - Lecture Notes in Mechanical Engineering (2020), 39-46.
- "Meromorphic solution of a class of non-linear differential equations with sharing one value", Journal of Analysis, Springer, Vol. 28, No. 2, (2020), 415-430.
- "Meromorphic solutions of nonlinear ordinary differential equations", Tbilisi Journal of Mathematics, Vol. 12, No. 2, (2019), 77-88.
- "Some general q-shift difference equation and their meromorphic solutions", AIP Conf. Proc. 2095, (2019), 030031-030041.
- "Existence of meromorphic solution of Riccati-Abel differential equation",
   Trends in Mathematics book series, Springer Series (2019), 21-28.
- "Generalization of uniqueness and value sharing of differential polynomials", Southeast Asian Bulletin of Mathematics, Vol. 41, (2017), 577- 588.
- "Weighted sharing and uniqueness of meromorphic functions", Tamkang Journal of Mathematics, Vol. 45, No. 1 (2014), 1-12.
- "Fixed Points and Uniqueness of entire and meromorphic functions",
   International Electronic Journal of Pure and Applied Mathematics, Vol. 7, No.3 (2014), 99-107.
- "Uniqueness and value-sharing of meromorphic functions", Kyungpook Mathematical Journal, Vol. 54, (2014), 511-519.
- "Uniqueness of meromorphic functions whose certain differential polynomials have two pseudo common values", Southeast Asian Bulletin of Mathematics, Vol. 37, (2013), 941-949.
- "Uniqueness of meromorphic functions with their nonlinear differential polynomials share a small function", Applied Mathematics Journal, Vol. 2, No. 11 (2011), 1364-1368.
- "Uniqueness theorems sharing one value of meromorphic functions", Proceedings of the Jangjeon Mathematical Society, Vol. 14, No. 3 (2011), 339-353.
- "Value sharing of meromorphic functions", International Journal of Mathematical Analysis, Vol. 5, No. 27(2011), 1321 – 1333.
- "On meromorphic solutions of a certain type of system of complex differential

   difference equations", International Journal of Scientific & Engineering

   Research, Vol 8, No.5(2017), 86-91.
- "Uniqueness of difference polynomials of meromorphic functions", Bulletin of Calcutta Mathematical Society, Vol. 105, No. 3(2013) 227- 236.
- "A uniqueness result related to certain non-linear differential polynomials", International Journal of Mathematical Archive, Vol. 3, No.6 (2012), 2327-2330.

- "Uniqueness and value-sharing of entire and meromorphic functions",
   International Journal of Mathematical Sciences, Vol. 11, No. 3- 4(2012),
   319-328.
- "A unicity theorem for meromoprphic functions concerning differential polynomials", International Journal of Mathematical Sciences and Engineering Applications, Vol. 6, No. 1 (2012), 273-279.
- "Nonlinear differential polynomials sharing small function", South East Asian
   J. Math. & Math. Sc. Vol.10, No.1 (2011), 105-123.
- "Uniqueness of entire and meromorphic functions with their nonlinear differential polynomials", Global Journal of Mathematical Science: Theory and Practical, Vol. 3, No. 3 (2011), 209-215.

## **Conference Proceedings**

- "Nevanlinna theory for finding meromorphic solutions of cubic-quintic Ginzburg-Landau equation arising in nonlinear dynamics" Springer - Lecture Notes in Mechanical Engineering (2020), 39-46.
- "Nevanlinna theory for existence of meromorphic solution to StuartLandau equation" Springer - Lecture Notes in Mechanical Engineering (2020), 373-379.
- "Some general q-shift difference equation and their meromorphic solutions", AIP Conf. Proc. 2095, (2019), 030031-030041.
- "Uniqueness theorems sharing one value of meromorphic functions", Proceedings of the Jangjeon Mathematical Society, Vol. 14, No. 3 (2011), 339-353.

#### **Book Chapters**

"Existence of meromorphic solution of Riccati-Abel differential equation",
 Trends in Mathematics book series, Springer Series (2019), 21-28.

#### **Books**

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#### Editorial

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#### Reviewer of Journals

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#### Editor/ Reviewer of Journal

- Computers and Mathematics with Applications, Elsevier Journal.
- British Journal of Mathematics & Computer Science, Science Domain International.
- International Journal of Industrial Mathematics.
- Asian Journal of Mathematics and Computer Research.
- Far East Journal of Mathematical Sciences.
- Advances in Mathematical Sciences and Applications
- Reviewer for zbMATH with ID 18301.

#### Patents NIL

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# Invited Lectures, talks and workshops

• Title of talk "Complex Differential Equations" in International conference on new trends in differential equations and applied mathematics on 13th April 2021 organized by Sri Vidya Mandir Arts & Science College, Krishnagiri, Tamil Nadu.