

## CURRICULUM VITAE

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### EDUCATIONAL BACKGROUND:

1979-82: B.A. (Hons.) Mathematics from University of Delhi.

1982-84: M.A. (Mathematics) from University of Delhi.

1991 : Ph.D (Mathematics) University of Madras.

From Nov. 1989: Post-Doctoral Fellow (N.B.H.M.) at School of Mathematics, SPIC Science Foundation, 92 G.N. Chetty Road, T. Nagar, MADRAS-600 017, INDIA.

From Feb. 1992-95: Fellow, School of Mathematics, Chennai Mathematical Institute, 92 G.N. Chetty Road, T. Nagar, MADRAS-600 017, INDIA.

From Aug. 1995: Reader, School of Mathematics, Chennai Mathematical Institute, 92 G.N. Chetty Road, T. Nagar, MADRAS-600 017, INDIA.

From August 2000: Fellow(E), Institute of Mathematical Sciences, C.I.T Campus, Taramani, Madras 600 113, India.

From July. 2001: Reader, School of Mathematics, Chennai Mathematical Institute, 92 G.N. Chetty Road, T. Nagar, MADRAS-600 017, INDIA.

From February. 2002: Associate Professor, School of Mathematics, Chennai Mathematical Institute, 92 G.N. Chetty Road, T. Nagar, MADRAS-600 017, INDIA.

From August. 2006: Professor, Chennai Mathematical Institute, H-1, SIPCOT IT Park, Siruseri, Tamil Nadu 603103, INDIA

## Awards

- Associate Member at the International Centre for Theoretical physics for the period 1996-2002.
- Awarded the Shanti Swarup Bhatnagar Prize for Mathematical Sciences for the year 2006.
- Elected “Fellow of the Indian Academy of Sciences” in January 2007.
- Awarded J.C. Bose National Fellowship in 2008.

## Others

- Editor, Journal of the Ramanujan Mathematical Society.
- Editor, TRIM Series for Mathematics.

## LIST OF PAPERS

1. V. BALAJI, Cohomology of certain moduli spaces of vector bundles, *Proc. Ind. Acad. Sci. (Math. Sci)* Vol. 98 (1988) pp. 1-24.
2. V. BALAJI, Intermediate jacobian of some moduli spaces of vector bundles on curves, *Amer. J. Math.*, Vol. 112 (1990) pp.611-630.
3. V. BALAJI, C.S. SESHADRI, Cohomology of a moduli space of vector bundles, *The Grothendieck Festschrift Volume 1, Birkhauser*, (1990) pp. 87-120.
4. V. BALAJI, Cohomology of some moduli spaces of vector bundles (to appear) in the *Proceedings of the Indo-French Conference in ‘Geometry’*, held in T.I.F.R., Bombay, 1989)
5. V. BALAJI, P.A. VISHWANATH, Deformations of certain moduli spaces of vector bundles, *Amer. Jour. Math.*, Vol. 115, No. 2 (1993) 279-303.

6. V. BALAJI, C.S. SESHADRI, Poincaré Polynomials of certain moduli varieties, Algebraic Geometry and Analytic Geometry, *ICM-90 Satellite Conference Proceedings*, Springer Verlag, (1991) pp. 1-25.
7. V. BALAJI, P.A. VISHWANATH, Picard sheaves and deformations of stable pairs, *Duke Math. Journal*, (Vol. 76, No. 3, December 1994) pp 773-792.
8. V.BALAJI, P.A. VISHWANATH, On the Theory of Deformations of the moduli Spaces of Vector Bundles ( in *Proc. of the Durham symp. on Vector Bundles in Algebraic Geometry*, Cambridge University Press, 1995)
9. V. BALAJI, Hodge conjecture for certain moduli varieties, *Proc. of the Indian Acad. of Sciences*, Vol. 105, No. 4 (1995) pp. 371-380.
10. V. BALAJI, L. BRAMBILA-PAZ and P.E. NEWSTEAD, Stability of the Poincaré bundle, *Math Nachrichten*, 188 (1997) pp. 5-15.
11. V. BALAJI, A. KING and P.E. NEWSTEAD, Algebraic cohomology of the moduli space of rank two bundles. '*Topology*', Vol. 36, No. 2 (1997) pp. 567-577.
12. V.BALAJI, I.BISWAS and D.S.NAGARAJ, Principal bundles over projective manifolds with parabolic structure over a divisor. *Tôhoku Math. Jour.* **53** (2001), 337–368.
13. V.BALAJI, I.BISWAS and SEBASTIAN DEL BANO ROLLIN, A Torelli type theorem for moduli space of parabolic vector bundles of rank two over curves. *Math. Proc. Cambridge Philos. Soc.*, vol 130 (2001), no.2, pp.269-280.
14. V.BALAJI, I.BISWAS, Semistable principal bundles over abelian varieties and homogeneous spaces. *Journal Ramanujan Math Soc.*, Vol 17, No 3, 2002) pp 187-209.
15. V.BALAJI, C.S.SESHADRI, Semistable principal bundles-I, *Journal of Algebra*, 258 (2002), pp 321-347.

16. V.BALAJI, A.J.PARAMESWARAN, Semistable principal bundles-II, *Transformation Groups*, Vol 8, No 1, (2003), pp 3-36.
17. V.BALAJI, I.BISWAS and D.S.NAGARAJ, Principal bundles with parabolic structures, *Electronic Research Announcements of the A.M.S.*, Vol 7 pp 37-44, April 2001.
18. V.BALAJI, I.BISWAS and D.S.NAGARAJ, Ramified  $G$ -bundles as parabolic bundles, *Jour. Ramanujan Math Society*, Vol 18, No 2 (2003) 123-138.
19. V.BALAJI, S.KANNAN and K.V.SUBRAMANIAM, Cohomology of Line Bundles on Schubert Varieties-I, *Transformation Groups*, Vol 9, No 2, (2004) pp 105-131.
20. V.BALAJI, I.BISWAS AND D.S.NAGARAJ, Krull-Schmidt Theorem for principal bundles, *J.reine.angew.Math*, **578** (2005), 225-234.
21. V.BALAJI, I.BISWAS, D.S.NAGARAJ AND P.E.NEWSTEAD, Universal Families on moduli of principal bundles, (to appear) *Int. Math. Res. Not.* 2006, Art. ID 80641, 16 pp. (arXiv:math.AG/0601168)
22. V.BALAJI, I.BISWAS AND D.S.NAGARAJ, Tannakian Krull-Schmidt Theorem, *J.Reine.Angew.Math*, **590**, 227-230 (2006).
23. V. BALAJI, I. BISWAS, D.S NAGARAJ, A.J. PARAMESWARAN, . Krull-Schmidt reduction of principal bundles in arbitrary characteristic. *Expo. Math*, **24** (2006), no. 3, 281–289.
24. V.BALAJI, Principal bundles on projective varieties and the Donaldson-Uhlenbeck compactification, *Journal Differential Geometry* **76**, (2007), pp 351-398.
25. V. BALAJI : *Addendum to* Principal bundles on projective varieties and the Donaldson-Uhlenbeck compactification, *Journal Differential Geometry* **83**, Number 2 (2009), pp 461-463.
26. V.BALAJI, A.DEY AND R.PARTHASARTHI, Geometry of parabolic bundles on surfaces-I, (The Donaldson-Uhlenbeck compactification), (*Proceedings of the Indian Academy of Sciences*, **118**, No 1, February 2008, pp 43-79. (archiv:math.AG/06001274)

27. V.BALAJI, J.KOLLÁR, Holonomy groups of stable vector bundles, (*RIMS Journal, Kyoto University* **44** No 2, May 2008, pp 183-211. (archiv:math.AG/06001120))
28. V.BALAJI, I.BISWAS O.GABBER AND D.S.NAGARAJ, Brauer Obstruction for universal bundles, *C. R. Math. Acad. Sci. Paris* **345**, (2007), no. 5, 265–268.
29. V.BALAJI, Lectures on Principal bundles, *Moduli Spaces and Vector Bundles, London Mathematical Society Lecture Notes*, Volume 359, July 2009.
30. V.BALAJI, I.BISWAS, Principal bundles on abelian varieties with vanishing Chern classes, *Journal Ramanujan Math Soc.*, Volume 24, No 2, June 2009, pp 191-197.
31. V. BALAJI, A. DEY, Parabolic bundles on algebraic surfaces II-Irreducibility of the moduli space, in Vector Bundles and Complex Geometry, *Contemporary Mathematics*, Vol. 522, Amer. Math. Soc., Providence, RI, 2010, pp. 7-22.
32. V.BALAJI, A.J. PARAMESWARAN, An analogue of the Narasimhan-Seshadri Theorem in higher dimensions and some applications. *Journal of Topology*, Volume 4, 2011, pp 105-140. (archiv:math.AG 0809.3765)
33. V.BALAJI, A.J. PARAMESWARAN, Tensor product theorem for Hitchin pairs-An algebraic approach, *Annales de l'Institut Fourier*, Volume 61, (2011), pp 2361-2403.
34. V. BALAJI, J. KOLLÁR, Restrictions of stable bundles. *Contemporary Mathematics* Vol 564, Amer. Math. Soc., Providence, RI, 2012.
35. V.BALAJI, C.S.SESHADRI, Moduli of parahoric  $\mathcal{G}$ -torsors on a compact Riemann surface, (to appear in *Journal of Algebraic Geometry*). (archiv:math.AG 1009.3485)
36. V.BALAJI, PABITRA BARIK, D.S. NAGARAJ, On Degenerations of moduli of Hitchin Pairs, *Electronic Research Announcements*, Volume 20, Pages 105110 AIMS (2013)

37. V.BALAJI, PABITRA BARIK, D.S. NAGARAJ, A Degeneration of the moduli space of Hitchin pairs, (2013)(math arXiv:1308.4490).