

# Curriculum Vitae

## **Personal Data**

Name : Ramakrishnan Trivandrum **Ramadas**  
Date of birth : 30 March 1955  
Nationality : Indian  
Email : ramadas@cmi.ac.in  
Phone : +91 8754576434 (cell)

## **Education**

Degrees : (Five-Year Integrated) M.Sc in Physics,  
Indian Institute of Technology, Kanpur (1977)  
Ph.D. in Mathematics, (TIFR) University of Bombay (1982)

## **Employment History**

Distinguished Professor, Chennai Mathematical Institute, Chennai, India (from 31 December, 2013)  
Head, Mathematics Group, International Centre for Theoretical Physics, Trieste, 2010-2013  
Research Scientist, ICTP, Trieste, 2003 - 2010.  
Professor, School of Mathematics, TIFR, Mumbai, till 2002  
Professor, University of Montpellier, France, 2000-2003

## **Honours, Awards, Appointments**

Fellow, Indian National Science Academy (2015)  
Fellow, Indian Academy of Sciences (1998)

JC Bose Fellowship (DST)  
SS Bhatnagar Prize in Mathematical Sciences, CSIR (1998)

Associate Editor, Mathematical Proceedings of the Indian Academy of Sciences  
Past Member, Editorial Board, Rendiconti Ist. Mat. Univ. Trieste  
Past Member, European Mathematical Society Committee on Developing Countries  
Past Member, Advisory Board, Pan-African Centre for Mathematics (Dar-es-Salam)  
Past Chair of the ICTP Prize Committee  
Past Chair, Ramanujan Prize Committee  
Member, National Organising Committee of the International Mathematical Olympiad, 1996. Chair of the INSA-ICSU Committee for Math (2016-)

Head, Mathematics Group, International Centre for Theoretical Physics, Trieste. Joint Head, Office of Associateships and Federations Schemes, ICTP

## **Selected Publications**

A. Mathematics/Mathematical Physics

0) *Rational and global forms of certain Chiral Conformal Field Theories; vertex algebras I* (preprint, 88pp.) arXiv:1401.1969

1) *Spin(7) Instantons and the Hodge Conjecture for Certain Abelian Four-folds: A Modest Proposal*, TR Ramadas, **Contemporary Mathematics 522**, AMS (2008) ;  
(Conference on Vector Bundles in Honor of S. Ramanan)

2) *The "Harder-Narasimhan Trace" and Unitarity of the KZ/Hitchin Connection: genus 0*, TR Ramadas, **Annals of Mathematics**, **169** , 1–39, (2009).

3) *Faltings' construction of the K-Z connection*, **Commun. Math. Phys.** **196**, 133-143 (1998).

4) *Frobenius splitting and invariant theory*,  
VB Mehta and TR Ramadas, **Journal of Transformation Groups.** **2**, 183-195 (1997).

5) *Moduli of vector bundles, Frobenius splitting, and invariant theory*,  
VB Mehta and TR Ramadas, **Annals of Mathematics** **144**, 269-313 (1996).

6) *Factorisation of generalised theta functions II*,  
TR Ramadas, **Topology** **35**, 641-654 (1996).

7) *Factorisation of generalised theta functions I*,  
MS Narasimhan and TR Ramadas, **Invent. Math.** **114**, 565-624 (1993).

8) *Some comments on Chern Simons gauge theory*,  
TR Ramadas, IM Singer and J Weltsman, **Commun. Math. Phys.** **126**, 409-420 (1989).

9) *The two-dimensional  $O(N)$  nonlinear sigma model: renormalisation and effective actions*,  
PK Mitter and TR Ramadas, **Commun. Math. Phys.** **122**, 575-596 (1989).

10) *The Wess-Zumino term and fermionic solitons*,  
TR Ramadas, **Commun. Math. Phys.** **93**, 355-365 (1984).

11) *On the space of maps inducing isomorphic connections*,  
TR Ramadas, **Ann. Inst. Fourier, Grenoble** **32 (1)** 263-276 (1982).

12) *Geometry of  $SU(2)$  gauge fields*,  
MS Narasimhan and TR Ramadas, **Commun. Math. Phys.** **67**, 121-136 (1979).

#### B. Theoretical Physics

13) *Aspects of spin and statistics in generally covariant theories*,  
AP Balachandran , TR Ramadas, et.al. **Int. Journ. Mod. Phys. A**, **4**, No. 20, 5459-5510 (1989)