CURRICULUM VITAE

Name: Jnanadeva MAHARANA
Designation : Raja Ramanna Fellow, Department of Atomic Energy
Date of Birth: October 31, 1945
Nationality: Indian

ACADEMIC QULIFICATIONS:

Ph.D.	Theoretical High Energy Physics	1973	Indian Institute of Technology, Kanpur
M.Sc.	Physics	1968	Indian Institute of Technology, Kanpur
B.Sc.	Physics (Hons)	1966	Ravenshaw College, Cuttack

FACULTY POSITION AT INSTITUTE OF PHYSICS:

Research Associate	1975 - 1977	Institute of Physics
Lecturer	1977 - 1980	Institute of Physics
Assistant Professor	1980 - 1988	Institute of Physics
Associate Professor	1985 - 1991	Institute of Physics
Professor	1991 - 2003	Institute of Physics
Senior Professor (OS)	2003 - 2010	Institute of Physics

Academic Distinctions:

1. Fellow Indian Academy of Sciences.
2. Fellow Indian National Science Academy.
3. Samanta Chandrashekhar Award for Physical Sciences, 1992
4. Jawaharlal Nehru Fellow December 1995 - November 1997.
5. Biju Patnaik Award for Science (Returned in 2010)

Permanent Address:

Institute of Physics
Sachivalaya Marg
Bhubaneswar - 751005, INDIA

RESEARCH INTERESTS:

My research interests lie in Theoretical High Energy Physics. I have worked on derivation of rigorous bounds in high energy scattering of hadrons and I have studied scalings of inelastic and elastic scattering cross sections from these perspectives.
I have worked on various aspects of quantum field theory. I investigated constraint structures of generalized nonlinear σ-models in $1+1$ dimensions, the models defined over Grassmann manifold. Moreover, I have studied integrability properties of large class of two dimensional models. I have worked on topological field theories in two spacetime dimensions. Such theories are obtained from twisting of superconformal field theories. In this context, I have constructed supertopological field theories on Riemann surfaces of arbitrary genus and computed correlation functions.
I have been working on string theory for more than twenty five years. My main focus has been to investigate symmetries of string theories. I have derived Ward identities for massless excitation of closed string using BRS phase space Hamiltonian formalism. I have worked on the noncompact duality symmetries which appear when the string effective action is toroidally compactified to lower spacetime dimensions. I have utilized the presence of this symmetry to obtain new string vacua through solution generating technique. I have also worked on string cosmology from various perspectives. I have continued interests in the study of duality symmetries. Field Theory, String Theory, Cosmology, Quantum Gravity.

APPOINTMENTS:

March 1973 - Dec. 1974	Post Doctoral Fellow	University of Tokyo, Japan
Sept. 1978 - Oct. 1980	Research Associate	Rutherford Appleton Laboratory, U.K.
Sept.1985 - Oct. 1986	Scientific Associate	CERN, Geneva
Sept. 1987 - Aug. 1988	Associe du Reseache	Laboratoire de Physique Theorique et Haute Energie Energie, Orsay
Aug. 1988 - July 1989	Guest Scientist	Fermi National Acceleration Laboratory, Batavia
August 1997 - January 1998	Scientific Associate	CERN, Geneva

Visiting Positions

July 1981 - Sept.1981	Visiting Scientist	University of Tokyo
June 1982 - Sept.1982	Scientific Associate	CERN, Geneva
June 1983 - Aug. 1983	Visiting Associate	International Center for Theoretical Physics, Trieste
June 1990 - Aug. 1990	Visiting Senior Associate	International Center for Theoretical Physics, Trieste
June 1991 - Aug.1991	Scientific Associate	CERN, Geneva
March 1992 - June 1992	Visiting Faculty	California Institute of Technology, Pasadena
June 1993 - Aug. 1993	Scientific Associate	CERN, Geneva
October 1994	Visiting Scientist	Isaac Newton Institute, Cambridge
October 1995 - Dec. 1995	Visiting Scientist	Institute for Advanced Study, Princeton
January 1997 - April 1997	Guest Scientist	FERMILAB, Batavia U. S. A.
April 1997 - July 1997	Directeur de Recherch	Ecole Poytechnique France
June 1998 - July 1998	Visiting Scientist	Albert Einstein Institute, Potsdam, Germany
January 1999 - April 1999	Visiting Professor	Yukawa Institute of Theoretical Physics, Kyoto

January 2001 - July 2001	Visiting Scientist	Albert Einstein Institute, Potsdam, Germany
Agust 2001 - August 2002	Visiting Professor	KEK, Tsukuba, Japan
September 2003	Visitor	KITP, Santa Barbara, USA
October 2003	Visitor	Caltech, Pasadena, USA
July 2004 - August 2004	Visiting Scientist,	RIKKEN, Japan
July 2005 - August 2005	Scientific Associate	CERN, Geneva
October 2005	Visitor	Institute for Advanced Study, Princeton
April - May 2007	Scientific Associate	CERN, Geneva
September - October 2009	Visiting Scientist	KEK, Japan
June - July 2010	Visiting Scientist	Ecole Polytechnique, France

I was appointed visiting **Scientific Associate** of the International Center for Theoretical Physics, Trieste, Italy for the period 1983 to 1989; and **Senior Scientific Associate** for the period 1991 to 1996.