# CURRICULAM VITAE

NAME : **Dr. Sonal DESAI** 

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#### AWARDS & SCHOLARSHIPS

Awarded Royal Astronomical Society (London) Fellowship, 1992

Awarded BOYCAST Fellowship, Department of Science & Technology, Govt. of India, 1991-92.

Awardee of grant of Department of Science & Technology, Govt. of India and University Grants Commission for contribution at 12<sup>th</sup> International Conference on Gravitation (Colorado, USA), 1989

Awardee of grant of 'Minor Research Project in Science', UGC, 1989

Awardee of 'Honorable Mention' of Gravity Research Foundation (USA), 1987

Awardee of the Senior Research Fellowship of Council of Scientific & Industrial Research, Government of India, 1986-88.

Awardee of the Research Fellowship of Government of Gujarat, 1985-86

Awardee of the Jawaharlal Nehru Memorial Fund Prize (New Delhi), 1984

Awardee of Mercantile Cooperative Bank (Bhavnagar) Felicitation Award, 1984

## **EDUCATIONAL QUALIFICATIONS**

Post-doctoral Astronomy Centre, University of Sussex, UK, 1991-92

\* Awarded BOYSCAST Fellowship of Dept. of Science & Technology

\*Awarded Royal Astronomical Society (London) Fellowship

Ph.D. (Maths) Dept. of Mathematics, Bhavnagar University, 1989

M.Sc. (Maths) -do- 1983 First (76%)

**Stood FIRST in the University** 

B.Sc. -do- 1981 First (65%)

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## **EXPERIENCE**

Visiting Fellow, Mathematics Empowerment Cell, Jawaharlal Nehru University, New Delhi; <u>2013-2014</u>.

Visiting Fellow, School of Computational & Integrative Sciences, Jawaharlal Nehru University, New Delhi; <u>2012-2013</u>.

Resource Faculty, *Inspire Program* in Science, DS&T, Govt. of India, 2011.

Guest Faculty in Mathematics, Centre for Bioinformatics, Jawaharlal Nehru University, New Delhi; 2002-2004.

Guest Faculty in Mathematics, Centre for International Trade & Development, Jawaharlal Nehru University, New Delhi; <u>1997-1998</u>.

Senior Assistant Director, All India Council for Technical Education, New Delhi; 1994-1996

Senior Assistant Professor, Department of Mathematics, Bhavnagar University; 1988-1994

#### **ACADEMIC CONTRIBUTIONS**

"Mathematics in Every Day Life", SNDT University Mahila College, Bhavnagar, June 2013.

"Role of Mathematics in Modern Science", DST Inspire Program, Department of Physics, Bhavnagar University, Bhavnagar; April 2011.

"Sciences in Ancient India", Foreign Service Institute, Ministry of External Affairs, 17 March 2009

Contributed in science series books entitled *Kutoohal* (Gujarati) by Oxford Uni. Press

Participated in International Conference on gravitation & cosmology, Goa, December 1987

Participated in Winter School of University Grants Commission on 'Quantum Gravity and Early Universe', Delhi, October 1988

Delivered lectures on 'Quantum Gravity' at Silver Jubilee Session of Gujarat Mathematical Conference, Rajkot, October 1988.

### **PUBLICATIONS**

A World of Stars (Tarashrushthi) -to be published by National Book Trust, New Delhi

"Stochastic Fluctuations in the Early Universe" (under preparation)

"Quantum effects and space-time singularity", *Journal of the Indian Mathematical Society*, vol.61, 1995, p.105 (with P.S.Joshi)

"Quantum effects near black hole singularity", *Classical Quantum Gravity*, vol.5, 1988, p.191 (with P.S.Joshi)

"Quantum effects near space-time singularities", *Modern Physics Letters A*, vol.2, Dec.1987, p.913

"Quantum effects near the singularity in a general cosmological scenario II", **Physics Letters A**, vol.125, 9 Dec.1987, p.181 (with P.S.Joshi)

"Quantum effects in a homogenous dust cloud collapse", *General Relativity* and *Gravitation*, vol.19, October 1987, p.1033 (with P.S.Joshi)

"Quantum effects near the singularity in a general cosmological scenario", **Physics Letters A**, vol.121, 11 May 1987, p.334 (with P.S.Joshi)

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