

Sundar Sarukkai
Professor and Director
Manipal Centre for Philosophy and Humanities
Manipal University

EDUCATION

1992: PhD, Theoretical Particle Physics, Department of Physics, Purdue University, West Lafayette, Indiana, USA. Thesis Title: *Topological Methods in Gauge Theory*

1985: M.Sc, Department of Physics, Indian Institute of Technology, Madras, India.

1983: B.Sc, St Joseph's College, Bangalore, India.

WORK EXPERIENCE

2010 – date: Professor and Director, *Manipal Centre for Philosophy and Humanities*, Manipal University.

2006 – 2009: Head, Centre for Philosophy, *National Institute of Advanced Studies*, Bangalore.

2007 – 2009: Dean, School of Humanities, *National Institute of Advanced Studies*, Bangalore.

2006 – 2009: Professor, School of Humanities, *National Institute of Advanced Studies*, Bangalore.

2000 – 2006: Fellow, *National Institute of Advanced Studies*, Bangalore.

1994 – 2000: Associate Fellow, *National Institute of Advanced Studies*, Bangalore.

1992 – 1994: Post-doctoral Fellow, *Institute of Mathematical Sciences*, Madras.

1985 – 1992: Teaching Assistant, Department of Physics, *Purdue University*.

Fellowships

PHISPC Fellowship. September 2003 – November 2004.

Fellow, Indian Institute of Advanced Study, Shimla, July 1999 – June 2001.

Homi Bhabha Fellow, June 1997 – May 1999.

David Ross Fellowship, Purdue University, Summer 1988.

Graduate Student Assistantship, Department of Physics, Purdue University, 1985 – 92.

Merit Scholarship, Indian Institute of Technology, Madras, 1984 – 1985.

PROFESSIONAL ACTIVITIES

Guest Editor, Special Section on the Moon, *Leonardo Journal*, MIT Press, 2008 – 2011.

Initial Judge, Digital Media and Learning Competition, HASTAC & MacArthur, USA, 2009 & 2010.

Editorial Board Member, Leonardo Book Series, MIT Press, USA, 2007 – date.

Member of the Council, Indian Council for Philosophical Research, 2009-2012.

Convener and Member, Working Group on Humanities, Social Sciences, Law and Management, Karnataka Knowledge Commission, Government of Karnataka, 2008 onwards.

Member, Curriculum Committee, Indian Institute of Science Education and Research (IISER), Mohali, 2008-2010.

Member, International Committee on Cultural Utilisation of Space (ITACCUS), committee of the International Astronautical Federation (IAF), 2008 onwards.

Steering Committee Member, Association for Logic in India, 2009 onwards.

Guest Editor, Special Section on Mathematics, *Current Science*; 88(3), 2005.

Jury Member, Global Crossings Award Jury Committee, International Award for artists using science and technology, Supported by Ford and Rockefeller Foundations, 2004 - 2005.

Member, Advisory Board, *International Society for the Arts, Sciences and Technology*, USA. August 2003 – date.

Guest Editor, Special Section on Review of Science Studies, *Economic and Political Weekly*, 38(35), 2003.

PUBLICATIONS

BOOKS

1. *Translating the World: Science and Language*. Lanham, New York, Oxford: University Press of America, 2002.

- Reviews** of the book in *META* 48(3), 2003; *Technical Communication Online* 2003; *Handbook of South Asian Languages and Linguistics* 2003.
2. *Philosophy of Symmetry*. Shimla: Indian Institute of Advanced Study, 2004.
Reviews of the book in *The Tribune*, April 25, 2004, *Current Science* 88 (4), 2005 and *Sandhan* IV(2) 2004.
 3. *Indian Philosophy and Philosophy of Science*. New Delhi: PHISPC/Motilal Banarasidass, 2005.
Reviews in *Economic and Political Weekly* XLI (22), 2006, *Current Science* 91(2), 2006, *Philosophy East and West* 59 (4), 2009, *International Journal of Hindu Studies* 13 (2), 2009.
- First Reprint: 2008.**

EDITED BOOKS

1. *Logic, Navya-Nyaya & Applications: Studies in Logic Series 15*. Eds. M. Chakraborty, B. Lowe, M.N. Mitra, S. Sarukkai. London: College Publications, 2008.
2. *Logic and its Applications: Springer Lecture Notes in Artificial Intelligence, 5378*. Eds. R. Ramanujam and S. Sarukkai. Berlin: Springer-Verlag, 2009.

BOOKS IN PRESS

1. *What is Science?* National Book Trust, 2011.
2. *The Cracked Mirror: An Indian Debate on Experience and Theory* (co-authored with Gopal Guru), Oxford University Press, 2012.

PAPERS

“Translation as Method: Implications for History of Science”, in *Circulating Knowledge*, Eds. B. Lightman, L. Stewart and G. McQuat, Brill Press, to appear.

“Possible Ideas of Necessity in Indian Logic”, *Journal of Philosophical Logic* 40, 2011.

“Complexity & Randomness in Mathematics: Philosophical Reflections on the Relevance for Economic Modelling”, *The Journal of Economic Surveys* 25(3), 2011.

Review of “The Dialogue of Civilizations in the Birth of Modern Science” by Arun Bala, *Philosophy East & West*, 61, 2011.

“Mathematics in Economics: Reducibility and/or Applicability?” *New Mathematics and Natural Computation* (forthcoming).

“Rituals, Knowledge and Method: The Curious Case of Epistemological Sanskritization”, in *Emotions in Rituals*, Eds. Axel Michaels & C. Wulf, (forthcoming).

“Many Faces: Reimagining the Moon”, Editorial, *Leonardo* 43 (3), 2010.

“The Possibility of Conservation: Some Philosophical Questions” (with Meera Baidur), *Indian Journal of Ecocriticism*. Vol.3, 2010.

“On Quiet Conversation: Ethics and the Art of Self-Conversation”, in *In Quiet Conversation: Essays for Mrinal Miri*. Eds. J. Sharma and R. Raju. Routledge, 2010.

“Multisemiosis and Incommensurability” (with Arun Murthi), *International Studies in the Philosophy of Science* 23(3), 2009.

“Phenomenology of Untouchability”, *Economic and Political Weekly* XLIV (37), 2009.

“Science and the Ethics of Curiosity”, *Current Science* 97 (6), 2009.

“A Semiotic Interpretation of Indian Logic”, in *Logic, Navya-Nyaya & Applications: Vol 1*. Eds: M. Chakraborty, et al. London: College Publications, 2008.

“Science and the Aesthetics of Language”, *Science, Literature and Aesthetics*, Ed. Amiya Dev, Delhi: PHISPC, 2009.

“The missing link in art-science discourse, or art and the social sciences”, Editorial, *Leonardo* 42(2), 106.

“Culture of Technology and ICTs”, in *ICTs and Indian Social Change*, Eds. A. Saith et al, London and Delhi: Sage, 2008.

“Subjective Foundations of Science: Language, Consciousness and Reason”, in *Foundations of Science*, Ed. B. V. Sreekantan, Orient Longman, 2008.

“Revisiting the unreasonable effectiveness of mathematics”, Re-printed in *Linguistic and Philosophical Investigations*, Ed. Marin Turlea, Vol 6, New York: Denbridge Press, 2007 and in *Foundations of Science*, Ed. B. V. Sreekantan, Orient Longman, 2008.

“Logic and Science: Some insights from Indian logic”, in *History of Science and Philosophy of Science*, Ed. P. K. Sengupta, PHISPC, 2008.

“Mathematics and Visuality”, Report in the eleventh *International Congress on Mathematical Education, Monterrey, Mexico 2008*. Report available at <http://tsg.icme11.org/document/get/797>.

“Indian Logic and Philosophy of Science: The Logic-Epistemology Link”, in *Logic at the Crossroads*, Eds. A Gupta et al, Delhi: Allied Publishers, 2007, pp. 140 – 163.

“Philosophy of Science and its Implications for Science and Mathematics Education”, in *The epiSTEME Reviews*, Eds. B. Choksi et al, Macmillan India, 2007, pp. 35 – 61.

“Dalit Experience and Theory”, *Economic and Political Weekly* XLII (40), 2007, pp. 4043 – 4048.

“Literary Reality and Scientific Fiction”, *JJCL* **44**, 2007.

“The writing of the social sciences”, eSocialSciences, January 2007,
http://esocialsciences.com/articles/displayArticles.asp?Article_ID=810

“Scienza ed etica del linguaggio”, *Incipit: etica della scienza*. **Vol 1**, pp. 28-35, 2007.
 (Translation into Italian of the paper ‘Science and the ethics of language’.)

“Mathematics, nature and cryptography: Insights from philosophy of information”, *Current Science* 92 (12), 2007, pp. 1690 – 1696.

“The relevance of Indian philosophy for philosophy of science”, in *Foundations of Knowledge*, Ed. S. Raval et al, Delhi: Pencraft International, 2007.

“Introduction: The Relevance of Indian Traditions for Social Science”, in *Philosophical Concepts Relevant to Sciences in Indian Tradition*. Ed. P. K. Sen. Delhi: CSC, 2008.

“The Use of Symbols in Mathematics and Logic”, in *Essays on the Foundation of Mathematics and Logic, Vol 2*, Ed. Giandomenica Sica, Italy: Polimetrica Publishers, 2005.

“Revisiting the ‘Unreasonable Effectiveness’ of Mathematics”, *Current Science* 88 (3), 2005, pp. 415 - 423.

“Matter and Space” in *Landscape of Matter*, Ed. S. Ananthamurthy et al. Bangalore Prasanga, Bangalore University, 2005, pp. 143 – 162.

“Beauty in the Beast”, Editorial, *Leonardo* 37(3), 2004, pp. 175 – 176.

“Praying to Machines”, *Leonardo Electronic Almanac* 11(8), 2003.

“Perspectives on Mathematics”, Editorial Piece, Special issue on Review of Science Studies, *Economic and Political Weekly* 38 (35), 2003, p. 3648.

“Applying Mathematics: The Paradoxical Relation between Mathematics, Language and Reality”, *Economic and Political Weekly* 38 (35), 2003, pp. 3662 – 3670.

Book review of *End of Time* by E. Tiezzi, *Current Science* 85(2), 2003, p. 214.

“Universality, Emotion and Communication in Mathematics”, *Leonardo Electronic Almanac* 11(4), 2003. Selected extended abstract as part of the International Conference *Encoding Altruism: The Art and Science of Interstellar Message Composition*, March 23 – 24, Paris.

“Interpreting Scientific Terms Across Traditions”, *Sandhan II* (2), 2002, pp. 57 – 72. Reprinted in *Consavvy Volume*, Edited by D. P. Chattopadhyaya, 2005.

“Outside/Inside: Merleau-Ponty/Yoga”. *Philosophy East and West* 52(4), 2002, pp. 459 – 478.

“Translation and Science”. *META* 46(4), 2001, pp. 646 – 663.

“Mathematics, Language and Translation”. *META* 46(4), 2001, pp. 664 – 674.

“Thinking the Labyrinth”, Book Review in *Current Science* 79(5), 2001, p. 661.

“Symbols of Truth: Objectivity and Reality in Science”, in *Science and Tradition*, Edited by A.K. Raina et al. Shimla: IIAS, 2000.

“Remembering M.N. Srinivas”, *Economic and Political Weekly*, 2000, pp. 431 – 433.

“Science, Knowledge and Society”, *Economic and Political Weekly* 34, 1999, pp. 779 – 784.

“Beyond Belief: Trust, Deception and Knowledge”, in *Studies in Humanities and Social Sciences* 6(2), 1999, pp. 23 – 40.

“Explaining Consciousness - Some Pointers from Philosophy of Mathematics”, in *Scientific and Philosophical Approaches to Consciousness*, Edited by S. Menon et al. Bangalore: IIAS, 1999.

“The ‘Other’ in Anthropology and Philosophy”, *Economic and Political Weekly* 32(24), 1997.

“Humanism & Technology”, In *Facets of Humanism*, Ed B V Subbarayappa, Affiliated East-West Press, 1995.

“Mathematization of the Human Sciences - Epistemological Sanskritization?”, *Economic and Political Weekly* 30(52), 1995, pp. 3357 – 3360.

“Topological Feedback in Kaluza-Klein Theory”, *Physics Letters B* 257, 1991, pp. 32 – 34.

PAPERS IN SEMINARS (Last five years)

INTERNATIONAL

“Vitalism and Material Agency”, Expert Meeting on *Project on Vitalism*, V2_Institute for the Unstable Media, Rotterdam, April 9-10, 2011.

“Nature of Knowledge in Indian Intellectual Traditions”, Public Lecture, International Conference on *Circulating Knowledge: East and West*, University of King’s College, Halifax, Canada, July 21, 2010.

“Translating Concepts”, International Conference on *Circulating Knowledge: East and West*, University of King’s College, Halifax, Canada, July 22, 2010.

Workshop on Global Justice, TISS and LSE, University of Chulalongkorn, Bangkok, January 7-9, 2010.

“Rituals and Knowledge”, International Conference on *Emotions in South Asian and European Rituals*, (organized by University of Heidelberg, Germany), Goa, January 3-6, 2010.

“Complexity and Randomness in Mathematics”, Conference on *Complexity in Economics*, CIFREM, University of Trento, Trento, Italy, October 27-28, 2009.

“Foot in Indian Thought”, International Conference on *Foot*, Free University, Berlin, November 5, 2009.

“Phenomenology of Untouchability”, ICPR International conference on *Phenomenology, Globalisation and Indian philosophy*, January 5-9, 2009, India International Centre, New Delhi.

“Science and the ethics of curiosity”, International conference on *Buddhism and Science*, Central University of Tibetan Studies, Sarnath, January 15-17, 2009.

“Computation and the nature of writing”, *Fourth Asia-Pacific Conference on Computation and Philosophy* (APCAP), NIAS, December 5-7, 2008.

“Laws and Incommensurability”, International Conference on *Incommensurability*, Department of Philosophy, University of Hyderabad, January 18 – 20, 2008.

“Philosophy of Symmetry”, Invited Paper at the *American Philosophy Association Annual Meet*, Baltimore, December 27 – 30, 2007.

“The Aesthetics of Space”, International Symposium on *Space and Culture*, NIAS, Bangalore, September 29 – October 1, 2007.

“What does it mean to be embodied?”, International Seminar on *Ego and Embodiment*, NIAS, Bangalore, September 3 – 5, 2007.

“Space and Philosophy”, OLATS conference on “Exploration in Space”, Valencia, Spain, Oct 3-6, 2006.

“Philosophy of Human Migration”, Plenary Panel, IAF conference, Valencia, Spain, Oct 3-7, 2006. (Video available on the web.)

“Indian logic, semiotics and modern science”, International conference on Logic, Navya-nyaya and applications: A homage to B.K. Matilal, January 3-7, 2007, Jadavpur University, Kolkata.

“Scientific essentialism and necessity”, International conference on “Necessity and Contingency”, Department of Philosophy, Calcutta University, Kolkata.

“Logic and explanation”, Second Indian Conference on Logic and its relationship with other disciplines, IIT Bombay, Jan 9-11, 2007.

“Philosophy of science and its impact on science and mathematics education”, Episteme-2, International conference on science and mathematics education, HBCSE, Mumbai, February 12 – 15, 2007.

“Science and Humanism”, Plenary panel, World Interim Philosophy Congress, Delhi University, New Delhi.

“Indian logic and philosophy of science: the logic and epistemology link”, Invited Plenary Lecture at the international conference on *Logic 2005*, IIT Bombay, January 9 – 13, 2005.

“Philosophy and Subjectivity”, Convivium VI - International meeting of philosophers, Bir, Himachal Pradesh, September 11, 2004.

OUTREACH COURSES

Outreach courses for college students on *The Future of Humanities*, Manipal University, 2010 and 2011.

Sixth Summer School on *Philosophy for the social sciences and humanities: Banality of Evil*, Manipal Centre for Philosophy & Humanities, Manipal University, July 4-16, 2011.

Fifth Summer School on *Philosophy for the social sciences and humanities: The Idea of Justice*, Manipal Centre for Philosophy & Humanities, Manipal University, July 1-15, 2010.

Philosophy of Education Workshop, Udaipur, February 20-25, 2010. (In collaboration with TISS and the Great Britain Philosophy of Education Society)

Three day workshop for the public on *What is Thinking?*, Mohile Parikh Centre, Mumbai, October 14-16, 2011.

Three day workshop for the public on *Philosophy, Art & Science*, Mohile Parikh Centre, Mumbai, August 25-27, 2010.

Four summer schools on *Philosophy for the social sciences and humanities* - a three week programme for postgraduate humanities and social science students from around the country, conducted in June 2006, 2007, 2008 and 2009, NIAS.

One advanced winter school (ten days) on *Philosophy for the social sciences: Phenomenology* at ICSSR Western Regional Centre, Mumbai, January 2009.

Courses on philosophy at Christ University, Bangalore, February-March and December 2007.

National Workshop on *Buddhist Philosophy and Modern Science: Matter and Motion*, Nalanda Mahavihara, Nalanda, November 2-7, 2007. Co-organisers: Nalanda Mahavihara, Nalanda, Bihar and Sambasha, Kolkata.

National Workshop on *Buddhist Philosophy and Modern Science: Space and Time*, Nalanda Mahavihara, Nalanda, November 2006. Co-organisers: Nalanda Mahavihara, Nalanda, Bihar and Sambasha, Kolkata.

Series of lectures on philosophy of science at Indian Institute of Science, Bangalore, March-April 2006.

Two-day workshop on philosophy (in Kannada) at Ninasam, Heggodu, April 2006.

Three-day workshop on philosophy of language (in Kannada) at Ninasam, Heggodu, 2007.

Module for course on philosophy of science at IISER, Mohali, March 2009.

One week module on Philosophy of Science, IISER Mohali, March 2-6, 2009.

Three outreach lectures on *The Nature of Necessity*, Department of Philosophy, University of Hyderabad, August 26-31, 2008.

Three lectures as Visiting Professor, Department of Linguistics, Delhi University, March 10-12, 2008.

Three lectures on Language at Indian Statistical Institute, Kolkata, March 19-20, 2008.

Conducted a two-day module in the writing workshop *Academic Writing* for Doctoral Students, ICSSR Western Division, University of Mumbai, November 20-21, 2007.

Conducted a three-day module in the writing workshop *Academic Writing* for Doctoral Students, ICSSR Western Division, University of Mumbai, July 7-9, 2008.

Workshop on knowledge management, Gandhigram Trust, February 17 and 18, 2006.

Three lectures on Philosophy of Language and Philosophy of Space, Colloquium on Philosophy of Language and Space, NEHU, Shillong, May 4 – 6, 2005.

SEMINARS ORGANISED

Co-Chair, Indian School on Logic and Applications (ISLA 2012), (An international workshop organized by the Association of Logic in India (ALI)), Manipal University, January 8-20, 2012.

Co-Organizer, Science and Narratives of Nature, International workshop supported by Situating Science Cluster, Canada; UNSW, Sydney; ISEAS, Singapore; ICPR and Manipal University, December 12-14, 2011.

Co-Chair of the international conference on Logic and its Applications, Institute of Mathematical Sciences, Chennai, January 10-12, 2009.

Chair and organizer of the International seminar, Fourth Asia-Pacific conference on computation and philosophy (APCAP), NIAS, December 5-7, 2008. As part of the IACAP conferences. Sponsored by Microsoft Research and Infosys.

Organizer, International Symposium on *Space and Culture*, NIAS, Bangalore, September 29 – October 1, 2007, co-organisers: Leonardo, Srishti School for Arts and Design, Bangalore and The Arts Catalyst, London. Supported by ISRO.

Co-organizer, International Seminar on *Ego and Embodiment*, NIAS, Bangalore, September 3 – 5, 2007. Supported by ICPR and CSC. Co-organisers: Arindam Chakrabarti, University of Hawaii and Rajesh Kasturirangan, NIAS. Supported by ICPR and CSC.

Symposium on *The History of Classical Indian Sciences*, Poornaprajna Institute of Scientific Research, Bangalore, February 25 – 26, 2008. Co-organisers: Poornaprajna Institute of Scientific Research, Bangalore.