

ICTS PUBLIC LECTURE

(UN)SEEN AT LAST: THE BLACK HOLE IN M87

The image of a ring of emission at 1.3 mm wavelength at the centre of the galaxy M87 has caught everyone's imagination. It is direct evidence of a long suspected black hole, and was made by combining signals from antennas spanning much of the globe. This lecture will describe three streams flowing into this achievement. These are (i) the properties of matter and light moving near black holes, (ii) their role in modeling the phenomena seen by astronomers at the centres of galaxies, and (iii) the techniques and technologies which made possible an image with angular resolution of 0.1 nano radian, corresponding to a few centimeters at the distance of the Moon.

RAJARAM NITYANANDA

Rajaram Nityananda currently teaches undergraduate physics and mathematics at the Azim Premji University. His long-standing interest in optics (among other things), nurtured at the National Aerospace laboratory, continued at the Raman Research Institute, and the National Centre for Radio Astrophysics of the Tata Institute of Fundamental Research. This led him into theoretical and computational aspects of gravitational lenses, image processing, and radio astronomy techniques - all of which have a bearing on the subject of this talk.

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Register online

<https://bit.ly/unseenM87>



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