

A Series of Lectures

On

Aspects of Black Holes

- 1. Pre-Einstein physics (1st class on 17th Feb 2006, 3-4 pm)**
 - a. Relativity & Newton's laws
 - b. Newton's law of gravity
 - c. Electromagnetic fields
 - d. Maxwell's equations
- 2. Special relativity (2nd class on 24th Feb 2006, 3-4 pm)**
 - a. Idea & results
 - b. Notion of space time
 - c. Relativitising gravity
 - d. General principles of relativity
- 3. General Relativity (3rd class on 3rd Mar 2006, 3-4 pm)**
 - a. Non-inertial frames & Equivalence Principle
 - b. Einstein's Equation
 - c. Black Holes (Mathematical & relativistic)
- 4. Black Hole Thermodynamics (4th class on 10th Mar 2006, 3-4 pm)**
 - a. The kinds of Black Holes
 - b. Laws of Black Holes
 - c. Entropy of Black Holes
- 5. Frontiers and New Results (5th class on 17th Mar 2006, 3-4 pm)**
 - a. Isolated Horizons
 - b. Entropy from Quantum Gravity

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Organized by: ***Research Fellows' Association, S. I. N. P***