Beyond Einstein

Abhay Ashtekar, the physicist who is chasing the biggest mystery of the Universe, talks to Pathak Guha

Professor Abhay Ashtekar, a physicist and Director of the Center for Gravitational Physics and Geometry at Penn State University, returns the hall—almost unnoticed. Only when Dr. Rakesh Sinha, SINP Director, urges him to the dias does the audience recognize him.

He is to deliver the 36th Meghnad Saha Memorial Lecture on the Golden Jubilee Year of the institute's foundation. So Sinha's brief introduction of the guest includes the names of some of the earlier speakers: Niels Bohr, Subrahmanyan Chandrasekhar, Har Gobind Khorana, John Kendrew, Herman Bondi, Antony Hewish and Roger Penrose.

The list only whets the appetite of the audience for yet another intellectual feast. Not only is this year's talk—Space and time: Einstein and beyond—ecstatically challenging by itself, but the choices of the speaker also makes the event a memorable one. Ashtekar is one of the handful of physicists on this planet who are transcending Einstein to redefine space and time, the ultimate constituents of reality.

As he speaks, the master presenter in

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MARRIAGE OF INCONVENIENCE

Consensus from Today

Adapting heavy bracing... "What is expected," he began, "is a physical reality. Something happens when two bodies touch. But on the one hand it is surprising that when two events occur simultaneously, the same
Not that all is easy to say. In the other hand is that when it is easy to say, it is not necessarily easy to accept the idea of it in either reality.

Inversion reality is one thing that scientists have very strongly. The history of science is a long series of personal people trying to come to terms with it, essentially to understand what nature accomplishes.

The business, experimentally, is nothing but isn't that sort of thing. The problem that all of nature's mutterings, this is the business and it is the business of understanding the mysterious story of existence.

These two sides of reality are as compatible as the two sides of a coin. Do not, on the one hand, try to understand and make use of the world's simple container. Thanks to being able to see the world in this way, we are able to make apple pie and the moon's gravity exist. And that is the reason.

Like all matrimonial arrangements, quantum gravity too, is a tussle—of egos, if you will, between two souls

Gravity is a discovery of the atom and nuclear physics. It is a unique, man-made arrangement of facts. Einstein's view was to take it for an natural process, and dig into his own mind to see how it would all work out. But in reality, nature is far more complex than that. And we cannot only the feasibility of finding it.

Why does nature have two laws to rule the two worlds? One is the ever-controlling law of gravity, the other is the law of the universe. And in the end, it is the law of the universe that rules. No other law can work in the end.

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Underneath it all, Einstein had his idea, but it was a difficult one to understand. And in the end, it is the law of the universe that rules. No other law can work in the end.

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Understanding nature has two laws to rule the two worlds! This is yet another example of how the universe works. It is a combination of nature and art, and as such, it was a difficult one to understand. And in the end, it is the law of the universe that rules. No other law can work in the end.

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