

# Tata Institute of Fundamental Research

Survey No. 36/P. Gopanpally Village, Serilingampally, Ranga Reddy Dist., Hyderabad - 500107

## Colloquium

#### Challenges and Possibilities in the Climate **Crisis: Toward New Visions**

### Vandana Singh

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How can we understand the paradox of substantial scientific evidence on anthropogenic climate change and the world's apparent reluctance to act on the issue? Although the climate crisis threatens modern industrial civilization and the integrity of the biosphere, we carry on with business as usual. Research suggests that while knowing the science behind human-caused climate change can be useful, this knowledge by itself does not get people to act. barriers go beyond technological - they are cultural, institutional, socio-economic, and psychological. In fact, climate change presents a serious challenge to our current paradigms, from the socioeconomic to the scientific. It resists our attempts to contain it within our disciplines, to conceptualize it, teach it, think about it and act Because it entangles science and technology with ethics, values, justice, economics and power, the climate crisis demands a radical transdisciplinarity as well as an examination of the historical origins of science as we know it. I present a conceptual framing based on my explorations in the Alaskan Arctic, the undergraduate physics classroom, science-fictional thought experiments, and This approach addresses some of the challenges of the climate problem at the intersection of physics, earth science, pedagogy, justice and action. I speculate on the possibility that the 'wicked problem' of climate may widen the horizons of science itself as we contemplate, as scientists and earthlings, how to live and act in the face of the climate crisis.

Monday, Jul 23<sup>rd</sup> 2018 2:30 PM (Tea/Coffee at 2:00 PM) Auditorium, TIFR-H