

# **INSTITUTE COLLOQUIUM**

INDIAN INSTITUTE OF SCIENCE BANGALORE

### PROFESSOR J SRINIVASAN

CENTRE FOR ATMOSPHERIC & OCEANIC SCIENCES
AND
DEPARTMENT OF MECHANICAL ENGINEERING

will deliver a lecture

on

# UNDERSTANDING MONSOONS AND THEIR VARIABILITY

On Tuesday, the 28<sup>TH</sup> March, 2000 at 4.00 PM in the Faculty Hall

## **DIRECTOR**

will preside

All are cordially invited.

Coffee: 5.00 PM

Reception Hall

Prof. S S KRISHNAMURTHY

Convener

#### ABSTRACT

Monsoons are a complex and fascinating phenomenon. They exhibit variability in temporal scales ranging from a few hours to years and spaţial scales ranging from few kilometers to many thousands of kilometers . Their complexity and rich structure arises on account of interaction between thermodynamics, fluid mechanics and heat transfer in the atmosphere and the ocean. During the past 30 years, there has been a great improvement in our understanding of the nature of monsoon variability because of the advent of satellites and computers. In this period, numerical modeling of the monsoon has become a major venture. In this lecture, we will examine monsoon and its variability through satellite data and a hierarchy of numerical models ranging from the simple energy balance models to the complex four-dimensional models.