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SEMINAR NOTICE

Title : **On the fine structure of the adjoint sensitivity and guidelines for placing observations to correct forecast errors**

Speaker : Prof. S. Lakshmivarahan,
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Venue : CAOS Seminar Hall

Date : Monday, 30th July 2018

Time : 3.30 PM

Tea Time : 3:15 PM

Abstract : In the four-dimensional dynamic data assimilation based on the variational approach (4-DVAR), adjoint sensitivity plays a critical role in forecast error correction. However, this classical approach is totally oblivious to the important question of placement of observations to maximize its impact on adjoint sensitivity. We have recently proved that the adjoint sensitivity is directly proportional to the square of the forward sensitivity of the model solution with respect to the control. Consequently, the best way to distribute the observations is to look for places where the magnitude of the forward sensitivities with respect to the control are a maximum. We will present this theory and illustrate it by a simple example

ALL ARE WELCOME