# **Financial Data Analysis I**



# Time Series Analysis with R

# August 10-11, 2012

# **Description:**

The Rmetrics Association (Asia Chapter), in collaboration with IGIDR, is offering a high quality workshop analysing Time Series Analysis with R. The course consists of four blocks, composed of 50% lecture, 20% examples and 30% case studies.

This workshop on *Time Series Analysis* is being conducted as a part of the series of workshops on *Financial Data Analysis Using R* from 9<sup>th</sup> August to 11<sup>th</sup> August, 2012, preceded by a one day workshop on *Programming with R: A Pragmatic Introduction* (separate registration).

#### Time and Date:

Friday, August 10, 2012:

Morning sessions	9 am – 12:15pm
Afternoon sessions	1 pm – 04:15 pm

# Saturday, August 11, 2012:

Morning sessions	9 am – 12:15pm
Afternoon sessions	1 pm – 04:15 pm

#### Location:

Mumbai (INDIA)

#### **Course Tutors:**

FDA Series Core Team Rmetrics (Asia) Core Team

### **Course Co-coordinators:**

Mahendra Mehta, Rmetrics Asia Susan Thomas, IGIDR

#### Registration and Enquiry:

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# **Course Topics:**

# **Time Series Data Manipulation and Visualisation**

Importing Time Series Data and Time Series Objects, important Time Series Libraries (xts, zoo and timeSeries), Comparison between Time Series Libraries, Time Series Data Visualisation

## **Stochastic Time Series Analysis**

Introduction to Stochastic Time Series, Time Series disaggregation into components, ACF/PACF, Analysis of Residuals, ARMA estimations, Histogram analysis

#### **Time Series Forecasting**

Introduction to Volatility Modeling and Time Series Forecasting, Volatility Forecasting, ARCH/GARCH model estimation, Residuals of GARCH model, RiskMetrics Market Risk Model, Performance Evaluation, Bootstrapping

#### **Course Audience:**

This is a hands-on course on Time Series Analysis using R. The course is well suited for students, academicians, professionals involved in financial data-modeling including volatility modeling who are interested in learning the R software environment.

\*Participants are required to bring Laptops with them.

\*For participants not well conversant with R, a one-day workshop (separate registration) is held to familiarise the audience with R and its capabilities, on the day before the 2-day Time Series Analysis workshop (on 9<sup>th</sup> August).

#### **Pricing Information:**

	For Students & Academia	Industry Professionals
2-day Time Series Workshop	14,000*	28,000*
3-day Time Series Workshop with first day Introductory R Workshop	18,000*	36,000*

- The course also offers Rmetrics e-books at discount. For more details and availability of books, visit https://www.rmetrics.org/ebooks
- Limited accommodation is available to outstation participants.
- For more information, Please visit http://www.neuraltechsoft.com/