# Brief Course in Financial Time Series with R

**Objectives:** Present the main time series techniques in the analysis of financial assepts profitability and volatility. Implementation, through the R programming language, of the main models.

### **Learning Program:**

- 1. Introduction
  - (a) The caracteristics of financial time series
  - (b) R programming language
- 2. Linear Time Series Models
  - (a) Stationary
  - (b) Correlation and Autocorrelation
  - (c) AR model
  - (d) MA model
  - (e) ARMA model
  - (f) Unit-root Nonstationary Models
- 3. Conditional Heteroscedastic Models
  - (a) Volatility
  - (b) ARCH model
  - (c) GARCH model
  - (d) I-GARCH model
  - (e) GARCH-M model
  - (f) E-GARCH model
- 4. Other Nonlinear Models

## **Other Informations**

Course Length: 21 hours

Place: Edifício Leonardo da Vinci, Iparque, Coimbra.

#### **Important Dates**:

• Registration deadline: 30th June.

• Course Start: 7th July

#### **Schedule:**

• 7/7/2018,14/7/2018 and 21/7/2018, 9:30am - 1:00pm, and 2:30pm - 6pm.

**Price:** 150€

#### Payment:

• 50% at course registration

• 50% at the end of the course

**Registration:** Send the registration form (link) and the payment receipt to catgat.geral@gmail.com.

 $\textbf{Informations:} \quad \texttt{catgat.geral@gmail.com} \; .$