Some Highlights from Rmetrics 2009

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The Rmetrics Project

The Rmetrics project aims to create a platform for teaching and prototyping methods in financial engineering. It is led by Diethelm Wuertz, and maintained by a team of developers.

The Rmetrics Conference

The Rmetrics conference has been held in the Meielisalp hotel at lake Thune each year since 2007. Many topics related to R and finance are presented.

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- Slides: `http://www.rmetrics.org/Meielisalp2009/Presentations/`

The Rmetrics Conference

Around 27 talks delivered, by a mix of industry practitioners and academics (around 50/50).

Yohan Chalabi: The timeDate and timeSeries classes

Yohan Chalabi of ETH Zurich delivered a presentation on the Rmetrics time/date management and time series classes (found in the timeDate and timeSeries packages).

Bernard Pfaff: The gogarch package

Bernard Pfaff of Invesco described the process by which the gogarch package was developed as a case study in implementing academic work in R.

The GO-GARCH process

The GO-GARCH (generalized-orthogonal GARCH) process was introduced by R. Van der Weiden in 2002. Let $\{x_t\}$ be an m-dimensional time series (e.g. returns on equities). $\{x_t\}$ is a GO-GARCH process if:

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- $h_{i,t} = \omega_i + \alpha_i y_{i,t-1}^2 + \beta_i h_{i,t-1}$

Bryan Lewis and Steve Weston: Iterators and list comprehension in R

REvolution's iterators and foreach package provide iterators and list comprehensions that are similar to those found in Python.

Diethelm Wuertz: Portfolio optimization with fPortfolio

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- Standard mean-variance with constraints
- minimum CVaR and VaR
- Lower partial moments