

WORKSHOP ON FINANCIAL MATHEMATICS

 DR SVETLANA BOROVKOVA

Date: Thursday, July 7, 2011

Time	Topic	Duration
08.00-09.15	Registration: Venue Ruang Multimedia Kimia	75'
09.15- 09.25	Welcome session by MC	10'
09.25- 10.00	Break	35'
10.00 - 12.00	Fundamentals of Financial Risk management, Main concepts: profit and loss, loss distribution, risk factors, risk mapping, Risk measures: Value-at-Risk and Expected Shortfall, Coherent Risk measures	120'
12.00 - 13.00	Lunch	60'
13.00 - 15.00	Standard methods of risk estimation: Variance-covariance method, Historical Simulation Method, Monte Carlo method, Backtesting VaR models, Concepts of conditional risk measurement, Volatility modeling, EWMA and GARCH	120'
15.00- 15.30	Break	30'

Date: Friday, July 8, 2011

Time	Topic	Duration
09.00 - 11.00	Modelling dependence between risk factors, Linear correlation, Multivariate Normal and t-distributions, Copulas as an advanced risk management tool, Alternative dependence measures, Multivariate conditional models	90'
11.00 - 13.00	Lunch	105'
13.00 - 15.00	Extreme Value Theory and its applications in Risk management, Operational risk as a new risk class, Liquidity risk, Stress testing/scenario simulations.	90'
15.00 - 15.30	Closing ceremony and break	30'