

FIM

Nachdiplomvorlesung

Hans Föllmer (Humboldt Universität zu Berlin)

Monetary Risk Measures for Large Systems

September 27 - December 20, 2011

Tuesdays 10.15 - 12.00h

HG G 43

ETH Zürich, Rämistrasse 101

Abstract

After a short introduction to the general theory of convex risk measures and their connection to actuarial premium principles, we focus on some recent developments. These will include the asymptotics of convex capital requirements for large portfolios, risk measures for stochastic processes and the appearance of temporal bubbles, and the local specification of risk measures for large spatial systems. The latter can be regarded as a non-linear extension of the local specification of Gibbs measures. We will try to explore this analogy further, especially with a view towards phase transitions and systemic risk.

FIM - Institute for Mathematical Research
www.fim.math.ethz.ch