ALPEN-ADRIA UNIVERSITÄT KLAGENFURT

INVITATION TO THE DOCTORAL SEMINAR

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"A class of recursive optimal stopping problems with an application to stock trading"

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Abstract

In this paper we introduce and solve a class of optimal stopping problems of recursive type. In particular, the stopping payoff depends directly on the value function of the problem itself. In a multi-dimensional Markovian setting we show that the problem is well posed, in the sense that the value is indeed the unique solution to a fixed point problem in a suitable space of continuous functions, and an optimal stopping time exists. We then apply our class of problems to a model for stock trading in two different market venues and we determine the optimal stopping rule in that case. This is a joint work with Tiziano De Angelis.

Michaela Hitz and the Department of Statistics look forward to seeing you at the talk!