



Department of Decision Sciences

De Finetti Risk Seminar

## Stochastic Differential Utility As The Continuous-Time Limit Of Recursive Utility

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6:00pm Room 3-E4-SR03 Via Röntgen 1 Milano

### Abstract

This paper closes a crucial gap in the literature on recursive preferences: We establish a convergence theorem that shows that discrete-time recursive utility, as developed by Kreps and Porteus (1978), converges to stochastic differential utility, as introduced by Duffie and Epstein (1992b), in the continuous-time limit of vanishing grid size.

Key Words: Stochastic differential utility, recursive utility, convergence, backward stochastic differential equation.

JEL Classification: D81, D91