



**UNIVERSITÀ DEGLI STUDI DI BERGAMO**

**Dipartimento di Scienze aziendali, economiche e metodi quantitativi**  
*Department of Management, Economics and Quantitative Methods*

## **SEMINARIO**

**Martedì 26 Settembre 2017**

**Dalle ore 10.30 alle ore 11.30**

Bergamo, Via dei Caniana 2 – sala Marida Bertocchi

### *Risk-Averse Stochastic Path Detection*

**Stephan Meisel,  
University of Münster (D)**

Path detection problems occur in a wide range of logistics applications, such as the prevention of smuggling and sabotage in supply chains, or vehicle roadside inspections. In this seminar we first introduce the path detection problem, and we then discuss a risk-averse solution approach. In the path detection problem an invader and a protector operate on a network with a set of possible sourcedestination paths. The protector aims at allocating security resources on the network such that the invader's path is detected with high probability. Errors in the protector's beliefs about the chosen path induce the risk of a low detection probability. We use coherent risk measures to mitigate this risk, and show that the resulting allocation policy is particularly effective in case of large errors in the beliefs.

Il seminario è aperto a tutti gli interessati, per eventuali informazioni:

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