



31 May - 03 June 2016
at
ISEG- Lisbon School of Economics
and Management

If you intend to submit a paper for the ASTIN COLLOQUIUM LISBOA 2016, you need to provide a **Synopsis** (using the template on the next page), complete this **Submission Form** and submit both to astincolloquium2016@gmail.com by **Saturday 7 May 2016**. Synopses and submission forms must be sent as MSWord attachments, please do not supply them in the body of an email. You will be advised of the outcome and, if accepted, your abstract will be uploaded to the website.

SUBMISSION FORM

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Title of Paper / Presentation / Session to appear in program:

Robust estimation of the parameters for the generalized Pareto distribution

Author/s:

1. René Stephan

2.

3.

4.

What will your final submission be? Presentation and Paper Presentation Only

If selected, what level of knowledge will delegates attending your session require? (please select only) one

No prior knowledge General industry knowledge assumed Technical/specific industry knowledge assumed

Note: If you are asked to present at ASTIN COLLOQUIUM LISBOA 2016, it will still be necessary for you to register and pay to attend the Colloquium. IAP does not subsidize, discount, pay for, or extend special registration offers for presenters or delegates.

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ABSTRACT

(TITLE OF PAPER / PRESENTATION TO APPEAR IN PROGRAM)

Robust estimation of the parameters for the generalized Pareto distribution

(Name of Author/s)

René Stephan

Key words: (enter up to 8 key words applicable to your abstract / paper / presentation)

Robustness, neighborhood system, contamination, influence curve, oscillation, M-estimator, one-step estimator, generalized Pareto distribution.

Purpose of your paper: (To assist delegates / readers searching for your paper on the website after the event, please enter a brief description (maximum 220 characters) on the purpose of your paper.)

Classical estimators tend to be sensitive to outliers and inefficient in real world situations. Robust statistics overcome these problems and provide a variety of new estimators and new instruments to assess the characteristics of estimators.

Abstract: (Place text here using font size Calibri (Body) 11)

The paper/presentation introduces robust statistics which provide a body of instruments to assess the characteristics of estimators and which provide estimators which are both robust to deviations from the strict model assumptions generally known from parametric models and which are at the same time relative efficient.

The question for robust methods may arise especially in cases of parameterizing large claims or extreme events. While classical estimation procedures may react sensitive to outliers and may tend to be inefficient in real world situations, robust estimation techniques provide more transparency to the characteristics of the estimators and allow for a tradeoff between robustness and relative efficiency.

Different types of robust estimators are presented, their characteristics discussed and applied to a sample of industry data. The results are discussed and compared with the classical maximum likelihood estimator.

Note: If you are not presenting a paper for this Colloquium, please include as much detail as possible in your Abstract (maximum three pages) to enable delegates to prepare for your session.

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