



# Lisbon Summer School in Insurance Developments

## **INSURANCE LINKED SECURITIES**

**Professor Alan Punter (London)**

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## **BIG DATA**

**Professor Christian Heumann (Munich)**

**June 05-08, 2017  
Estoril, Portugal**

**Registration open until May 15, 2017**

# Invitation

The Institute of Actuaries of Portugal (IAP) is pleased to announce that the Lisbon Summer School in Insurance Developments will be held at Estoril, Portugal, during June 05-08, 2017.

## Topics in Insurance Developments

### **Topic 1. June 05-06, 2017. Insurance Linked Securities**

*Everybody's Talking*, goes a famous songline by Harry Nilsson. One thing they're talking about is insurance linked securities (ILS), financial instruments that are used as alternatives to traditional reinsurance. But what are ILS?

Professor Alan Punter (London) will tell the audience about the evolution of ILS, their characteristics, and the current and future developments of the ILS market.

### **Topic 2. June 07-08, 2017. Big Data**

Another topic on everybody's lips is Big Data. Insurers do collect a lot of data, but do they use it?

Professor Christian Heumann (Munich) will give a two-day lecture series on the definition and the utilization of big data, not exclusively linked to insurance. Of special interest to insurers will be to learn about the organization of data so that it can be efficiently analyzed.

## Who should attend

The target audience is actuaries and insurance professionals who want to understand better the current developments in insurance and reinsurance. Membership in an actuarial association is not required.

## Venue

The Summer School will be held at Hotel d'Inglaterra, Estoril. The town of Estoril lies about 20 km from Lisbon and offers many facilities for a pleasant stay. The hotel is near the beach, the casino and the train station, from which you can make a beautiful 1/2h trip to Lisbon, along the sea and the Tagus river.



## Fees

	<b>IAP Members</b>	<b>Non-IAP Members</b>	<b>Cancellation refund</b>
Until 15th April	Full registration: 900.00 € Single-topic: 500.00 €	Full registration: 1000.00 € Single-topic: 550.00 €	100%
Between 15th April and 15th May	Add 100.00 € to the amounts above		80%

The fees cover welcome cocktail, lectures, lunches and coffee breaks. Full registration includes a joint dinner. Joint dinner is also available for other participants with a 20€ participation fee.

A 10% discount applies for 4 registrations or more from the same company.

A 20% discount applies for eight registrations or more from the same company.

## Accommodation

Knowing that preferences and budgets for accommodation differ, we ask you to make your own hotel booking.

Hotel Inglaterra will offer accommodation at a promotional rate that you can access by quoting our code when you make your booking. We will send you the code after we have received your payment. Vacancies are limited.

There are many hotels in Estoril, nearby Cascais, (or in Lisbon), that you may also consider. If you plan to attend, please make your booking soon, as Portugal is a very popular tourist destination in summer.

# Registration

Please send an email to [IAPSS2017@gmail.com](mailto:IAPSS2017@gmail.com). We will send you an invoice with payment instructions.

For more information: <http://www.lisbonsummerschool.org/>

We hope to see you in Portugal this summer.

Yours sincerely

José Manuel Mendinhos  
President, Instituto dos Actuários Portugueses (IAP)



Hotel d'Inglaterra, Estoril  
([www.hotelinglaterra.com.pt](http://www.hotelinglaterra.com.pt))

**Topic 1. June 05-06**

**INSURANCE LINKED SECURITIES (ILS)**

**Professor Alan Punter (London)**

**Synopsis**

1. Introduction – the convergence of re/insurance and capital markets
2. The evolution of Alternative Reinsurance Capital (ARC)
3. Principal forms of Insurance-Linked Securitisation (ILS):
  - Catastrophe bonds, case studies of landmark transactions covering Property risks, Non-property risks, Life & health risks
  - Characteristics of cat bonds – inc. triggers, pricing, resets, defaults
  - Industry Loss Warranties
  - Sidecars
  - Contingent capital
4. Comparison of reinsurance/retro with various types of ILS
5. Current developments in re/insurance & ILS, and future prospects:
  - Trends in the supply of, and demand for, risk capital
  - Trading of insurance risk
  - Changing re/insurance industry dynamics
  - Future prospects for ILS
6. List of reference sources and further reading

**Speaker**

Alan Punter worked for 25 years in global insurance broking groups, in a variety of technical, executive and strategic roles. Since retiring in 2008 he has had a diversity of lecturing, research and consultancy activities, including as Visiting Professor in Insurance and Risk Financing at the Cass Business School, City, University of London, author and co-author of several research reports, and Research affiliate at the Cambridge Centre for Risk Studies, Judge Business School, University of Cambridge.

## **Topic 2. June 07-08**

### **BIG DATA**

**Professor Christian Heumann (Munich)**

### **Synopsis**

- Big data: definition; examples; problems; to make useful use of big data, one has first to learn from small data.
- Introduction to important principles which are necessary for all machine learning algorithms (randomization, regularization, re-sampling, cross-validation, etc.).
- Popular learning algorithms for regression and classification: random forest, neural network, boosting, LASSO, etc.
- Special topics: text mining, sentiment analysis, deep learning
- Practical work: software for analysing big data. Participants should apply the methods to (big) data sets which are publicly available.

### **Speaker**

Christian Heumann (1962) was born in Dachau, Germany. He studied Statistics, Economics and Political Science at the Ludwig-Maximilians-Universität (Munich) from 1986 to 1992. He achieved his doctorate in 1997 and his habilitation in 2004. Since 2004 he has worked at the Ludwig-Maximilians-Universität, where he is now a full professor.