



QUANTLIB USER MEETING (QLUM) 2017

NOVEMBER 30th 2017

VENUE: IKB DEUTSCHE INDUSTRIEBANK AG | DÜSSELDORF

Sponsored by:
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QUATERNION

QUANTLIB

The QuantLib project is aimed at providing a comprehensive software framework for quantitative finance. QuantLib is a free/open-source library for modeling, trading, and risk management in real-life.

QuantLib is written in C++ with a clean object model, and is then exported to different languages such as C#, Objective Caml, Java, Perl, Python, GNU R, Ruby, and Scheme. The QuantLib- bAddin/QuantLibXL project uses ObjectHandler to export an object-oriented QuantLib interface to a variety of end-user platforms including Microsoft Excel and OpenOffice.org Calc.

Appreciated by quantitative analysts and developers, it is intended for academics and practitioners alike, eventually promoting a stronger interaction between them. QuantLib offers tools that are useful both for practical implementation and for advanced modeling, with features such as market conventions, yield curve models, solvers, PDEs, Monte Carlo (low-discrepancy included), exotic options, VAR, and so on.

Finance is an area where well-written open-source projects could make a tremendous difference:

- any financial institution needs a solid, time-effective, operative implementation of cutting edge pricing models and hedging tools. However, to get there, one is currently forced to re-invent the wheel every time. Even standard decade-old models, such as Black-Scholes, still lack a public robust implementation. As a consequence many good quants are wasting their time writing

C++ classes which have been already written thousands of times.

- By designing and building these tools in the open, QuantLib will both encourage peer review of the tools themselves, and demonstrate how this ought to be done for scientific and commercial software. Open standards are the only fair way for science and technology to evolve.

The library could be exploited across different research and regulatory institutions, banks, software companies, and so on. Being a free/open-source project, quants contributing to the library would not need to start from scratch every time.

- Students could master a library that is actually used in the real world and contribute to it in a meaningful way. This would potentially place them in a privileged position on the job market.

- Researchers would have a framework at hand, which vastly reduces the amount of low-level work necessary to build models, so to be able to focus on more complex and interesting problems.

- Financial firms could exploit QuantLib as base code and/or benchmark, while being able to engage in creating more innovative solutions that would make them more competitive on the market.

- Regulatory institutions may have a tool for standard pricing and risk management practices.



QLUM HISTORY AND RATIONALE

The QuantLib Workshop in 2011 held at HSH Nordbank was the initial inspiration for IKB to have a regular meeting where people could exchange their ideas and experience about QuantLib.

IKB (cosponsored by d-fine and Quaternion) therefore decided to have the first QuantLib User Meeting in 2013 held at IKB in Düsseldorf. There has been positive feedback to the first meeting which is why we decided to continue in 2014, 2015 and 2016.

The talks always represented a good mixture of subjects ranging from very quantitative ones like the implementation of a stochastic local volatility calibration in QuantLib to more general aspects like how to effectively use scripting languages like R in QuantLib.

We want to carry on this tradition for 2017.

Check out the talks section to see what is planned for this upcoming event.

TALKS

Thursday, NOVEMBER 30TH

Preliminary agenda, please use the [registration link](#) to indicate whether you would like a speaking slot.

09:00 – 09:45 USER REGISTRATION

09:45 – 10:00 **Michael von den Driesch:** Greeting

10:00 – 10:45 TALK 1

10:45 – 11:30 **Sebastian Schlenkrich (d-fine)**
Structured Payoff Scripting in QuantLib

11:30 – 12:15 **Peter Caspers, Roland Lichters (Quaternion)**
Open Source Risk Engine update: Release 3, Use Cases, Credit Preview
Cash-Settled Swaption pricing

12:15 – 13:45 LUNCH BREAK

13:45 – 14:30 **Bernd Lewerenz (HSH Nordbank)**
Uncertain Volatility Model: Solving the Black Scholes Barenblatt
Equation with the method of lines

14:30 – 15:15 **Werner Kürzinger (HSH Nordbank)**
Aspects of Pricing Irregular Swaptions with QuantLib

15:15 – 15:45 COFFEE BREAK

15:45 – 16:30 TALK 6

16:30 – 17:15 TALK 7

17:30 – 18:00 TALK 8

18:00 – 18:15 **Michael von den Driesch:** Closing

19:00 – DRINKS AND DINNER (Alter Bahnhof | Düsseldorf-Oberkassel)

VENUE AND REGISTRATION

The number of seats is limited to 70.

There is no registration fee.

Seats can't be guaranteed. Please be fair. Only apply for a seat if you really plan to attend.

[Register here](#)

CONTACT

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