



- :: TRADING
- :: DERIVATIVES
- :: COMMODITIES
- :: FIXED INCOME
- :: ALGORITHMIC TRADING
- :: BANKRUPTCY
- :: RISK MANAGEMENT

## Industry experience

<b>University of Miami</b> Lecturer	<b>2021–Present</b>
<b>SPARKCOGNITION</b> Head of Market Research and Trading Strategies	<b>2021 – 2023</b>
<b>Fairfield University</b> Adjunct Professor	<b>2019–2021</b>
<b>Natixis</b> Head of Macro Trading America	<b>2018 – 2021</b>
<b>DRW</b> Trainer	<b>2018</b>
<b>Marto Capital</b> Head of Risk Management, Portfolio Construction	<b>2016 – 2017</b>
<b>UBS</b> Global Co-Head of Trading Head of USD Trading Co-Head USD Trading Head of USD Non-Linear trading	<b>2010 – 2016</b> <b>2013 – 2016</b> <b>2010 – 2012</b> <b>2011 - 2012</b> <b>2010 – 2011</b>
<b>LEHMAN BROTHERS, LEHMAN ESTATE</b> Global Head of Rates, FX and Equity Head of USD Rates Exotics	<b>2007 – 2010</b> <b>2008 – 2010</b> <b>2007 - 2008</b>
<b>CITIBANK</b> Head of USD Exotics and Medium Term Notes Structuring USD options Trader Fixed Income Quantitative Research	<b>2002 – 2007</b> <b>2005 - 2007</b> <b>2004 – 2005</b> <b>2002- 2004</b>
<b>CDC FINANCIAL PRODUCTS</b> Senior Derivative Trader	<b>2001-2002</b>
<b>MIZUHO CAPITAL MARKETS</b> Senior USD Option Trader Head USD Option Trader Officer of Research and Development	<b>2004–2005</b> <b>2000 - 2001</b> <b>1997 - 2000</b> <b>1994 – 1995</b>

## Education

<b>Rockefeller University</b> Post-Doctoral Research Fellow	<b>1994-1995</b>
<b>Princeton University</b> PhD Statistical & experimental physics MA Statistical & experimental physics	<b>1992-1995</b> 1995 1992
<b>Ecole Normale Supérieure de Lyon</b> Agrégation Physics MS Statistical Physics	<b>1990-1991</b> 1991 1990
<b>Lycée Louis-Le-Grand</b> Classes Préparatoires Scientifiques	<b>1986-1988</b>

[ NOT RETAINED ]

# Luc Faucheux, PhD

Luc Faucheux received his Ph.D. in Physics from Princeton University, mostly focusing on the interplay between stochastic and deterministic forces. His thesis work included the first experimental optical thermal ratchet. Luc received his Master's in Statistical Physics from Ecole Normale Supérieure in Lyon, France.

For the next 25 years or so, Luc held various positions in quantitative research, trading, and management on Wall Street, mostly focused on the Fixed-Income derivatives side, both on the sell-side and buy-side. Luc managed the USD rates options book at Citibank, as well as Head of USD Rates trading at UBS.

More recently Luc was Head of Macro Trading for Natixis in the Americas, covering FX, Rates, and Commodities. In 2021, Luc joined Spark Cognition, and AI startup applying Deep Learning to the fields of energy production and aviation, finance, and cybersecurity to name a few.

Up until 2021, Luc was teaching Global Capital Markets at the Dolan School of Business in Fairfield, Connecticut before moving down to Miami, where he is also now a lecturer at the Herbert School of Business.

Luc has had extensive experience as an expert witness, in particular in cases related to Citibank and Lehman Brothers bankruptcy.



## Areas of expertise

### Interest rate derivatives:

- + Fixed-income, yield curves
- + Structured notes, callable debt issuance
- + Option modeling, option pricing
- + Exotic options
- + Complex securities
- + Option exercise / settlement
- + Swaps, futures, ETFs
- + Muni swaps

### Trading:

- + Trading, algorithmic trading
- + Machine learning, automated AI trading

### Portfolio management:

- + Portfolio management,
- + Risk management
- + Fund allocation
- + Systematic global macro
- + Commodities

### Bankruptcy

- + Asset unwinding
- + Bilateral & multilateral compression
- + Derivative bankruptcy workout

### Keywords:

Cybersecurity, global capital markets, Fixed-Income derivatives, structured products, complex securities, exotics, futures & options, USD rates options, option exercise, option settlement, option pricing, global macro, bonds, delta, derivatives, Equity-linked swaps (ELS), FINRA Series 24 Principal, fixed income, futures & options, FX forwards, FX options, gamma, Greeks, listed derivatives, machine learning (ML), put-call parity, swaps, trader, trading, treasury bond futures, volatility, FX, foreign exchange, interest rates, yield curve, yield curve construction, structured notes Issuance, callable debt issuance, Muni swaps, FX, commodities, market research, trading strategies, artificial intelligence (AI), market making, alpha generation, hedge funds, portfolio management, interest rate swaps, risk management, portfolio construction, fund allocation, USD Medium Term Notes, structuring, quantitative research, equity swaps, trading manager, asset unwinding, bilateral and multilateral compression expert, derivative bankruptcy workout, hedging.