



Jean-Marc MERCIER

Address: 196 rue Saint Maur, 75010 Paris France.

Born: 03/07/1967. French citizenship.

Tel: (+33) (0)677640685.

Email: jeanmarc.mercier@crimere.com [Blog](#).

EDUCATION: Ph-D, Applied Mathematics.

SPECIALTIES: Finance – Information systems – Mathematics.

- **FINANCE:** Equity derivatives (6 years experience), Financial modelling (8y), Sophis Risque (6y).
- **INFORMATION SYSTEMS:** C++ (8y), business analysis (3y), algorithms and systems (16 y), data hosting / cloud computing (1y).
- **MATHEMATICS:** partial differential equations (16y), financial mathematics, (8y), numerical analysis (16y).

EXPERIENCE: Entrepreneur – Consultant – Engineer – Researcher -Teacher.

Jul. 2005-- **C.E.O. [CRIMERE S.A.R.L.](#)**

Mar. 2009--**CHAIRMAN. N.P.O [MNEMOSINE](#).**

CRIMERE is a very small young innovative French company, that I created in jul. 2005, dedicated to host my research activities and a small consultancy business. **MNEMOSINE** is a young Non Profit Organisation that I created for the Mnemosine project.

- [Optimally transported schemes](#). An innovative and performing numerical analysis technique, having potential industrial applications in finance, metrology, spatial, architecture... In partnership with the French research structure CNRS ([Laboratoire J.L.Lions](#)). Funded by [OSEO](#). [Code](#) and research papers in open access.
- [Economical crisis risk](#). A research project that proposes an approach to quantify the economical risk crisis. [Code](#) and research papers in open access.
- [MNEMOSINE](#). A data hosting / cloud computing ethical project dedicated to individuals. It consists in a juridical structure that combines non profit organisations and corporates, together with an information system, to propose a reasonable framework allowing tackling the constitution, preservation and transmission of the digital patrimony of individuals. In partnership with [SUN Microsystem](#).

Apr. 04-Dec 06. [Natixis](#). FRONT TO BACK BUSINESS ANALYST.

This consultancy activity as a business analyst for the Equity Derivative trading desk was based over my knowledge of [Sophis Risque](#) software.

- Jan 06 - Dec 06. **FRONT BUSINESS ANALYST**. Equity Derivative dpt. Resp: G. Thouvenel.
Deal netting. Export of aggregated deal from the Front Sophis *Risque* Database to the NBP transversal



Jean-Marc MERCIER

Address: 196 rue Saint Maur, 75010 Paris France.

Born: 03/07/1967. French citizenship.

Tel: (+33) (0)677640685.

Email: jeanmarc.mercier@crimere.com [Blog](#).

cash action back office software KTP, with impact on accounting, reconciliation, and settlement system.

- **Sophis Risque major version upgrade.** Upgrade from Sophis Risque 4.5.1 to 5.1.3, with installation of the back office and Loan and Repo modules.
 - **Information system de-merging.** Resulting from the de-merging of Equity Derivative activities and FSM (Transversal NBP Market activities).
 - **Information system merging.** Resulting from the merging of activities between EQD and Natexis Arbitrage (an equity derivative business subsidiary of Natexis).
 - **Electronic market for future.** Front to Back installation of GL Platform for electronic activities on future markets.
 - **Specification of the EQD Derivative Value at Risk** (unattended project)
- Déc. 04 - Déc 05. **FRONT BUSINESS ANALYST.** Equity Derivative department. Resp. O. Lefrere, S. Millin
Electronic market for cash action. Installation of the Front part of an EMS-SLIB Platform using EQD EURONEXT Direct Market Access. ● **Grid computing.** Starting the grid computing activity for Natexis group: benchmarking and qualification of a grid software for the equity derivative pricing library. ● **Sophis Risque Database purge project,** using a general graph analyzer tool. ● **Database access securing instrument workflow,** a tool to secure instruments modifications using a workflow.
 - Apr 04 - Oct 04. **FRONT BUSINESS ANALYST.** Ixis / Equity Derivative department.
Client contribution ● stress test scenarios ● P&L explanation ● GL to Sophis ● Trade integration ● rate curves import ● pricing methods.

Mar 01-Nov 03. **RESEARCH ENGINEER.** [Sophis technology](#).

Research and development activity for the Sophis Risque pricing library, based over my knowledge over Partial Differential Equations and numerical analysis.

P.D.E. solver. Specification, design and implementation of a P.D.E. solver engine using an advanced numerical schemes ([link](#)) for exotic equity pricing. ● **Credit risk.** 1st specification of the credit risk module (intensity Poisson law based calibrated through Credit Default Swap Market). ● **Monte-Carlo.** Architecture and optimisation of Monte-Carlo methods (C++ template programming). ● **Value at Risk.** Specification and implementation of a scenario engine for Credit Lyonnais..

RESEARCHER. EUROPEAN COMMUNITY ([TMR Networks](#)). Dec 96-Oct 00.

Post doctoral fellowships in Applied mathematics, hosted by the European research networks. Research fields: « Hyperbolic conservation laws ».

- **Ecole Polytechnique, Paris, France.** Mar 00 – Oct 00.
- **Università di Salerno, Italy.** Sept 99 - Fev 00.
- **Universidad del Pays Vasco, Bilbao, Spain** - Sept 98 - Sept 99.
- **SISSA (Institut for the Studies and Advanced Research), Trieste, Italy.** Sept 97 - Fev 98.
- **Università di Pisa, Italy** - Dec 96 - Sept 97.



Jean-Marc MERCIER

Address: 196 rue Saint Maur, 75010 Paris France.

Born: 03/07/1967. French citizenship.

Tel: (+33) (0)677640685.

Email: jeanmarc.mercier@crimere.com [Blog](#).

RESEARCHER PH-D. [Universite Bordeaux I](#). Dec. 96-Oct 00.

Ph-D in applied mathematics. Research field: « Big Bang » theory, quantum gravitation.

Thesis title : "Semi linear systems of wave equations ". **Thesis supervisor:** B. Hanouzet.

TEACHING.

- **Università di Napoli, Italy** post doctoral course. Fev 2000.
- **Université Bordeaux I. France.** Teaching assistant. Sep 93 - Sep 96.

CONFERENCES & PUBLICATIONS.

- **Conferences:** Ecole Polytechnique, Mars 2002, Ecole Nationale des ponts et chaussées, Jan 2002, Ecole Nationale Supérieure d'Ulm, Sept 2000, Institut Henri Poincaré, Dec 1999, ...
- **17 publications / work in progress.**

LANGUAGE: French, English, Italian, Spanish. A few German.