6610 Fifth Avenue Pittsburgh, PA 15206 Cell (412) 915-0686 Office (412) 268-5584 juanr@andrew.cmu.edu

# **JUAN CARLOS RIVERA**

#### **EDUCATION**

# Carnegie Mellon University (Pittsburgh, PA)

Ph.D. Candidate in Mathematical Finance (Aug. 1998 - Present). Expected

graduation: May 2003.

M.S. in Mathematics (May 2000)

#### Los Andes University (Bogotá, Colombia)

B.S. in Mathematics (March 1997)

# RESEARCH INTERESTS

Stochastic control applied to pricing and hedging and to optimal consumption and investments in incomplete markets, e.g. transaction costs, portfolio constraints. Term Structure Models. Convex analysis and duality. Optimization theory and algorithms.

# PROFESSIONAL EXPERIENCE

## **Georgia State University 2003**

*Instructor-* M.S. Program in Mathematical Risk Management: Interest Rates Models.

### Carnegie Mellon University 1998

*Teaching Assistant* - M.S. Program in Computational Finance: Stochastic Calculus, Term Structure Theory and Practice. Undergraduate mathematical finance.

### Los Andes University 1995 - 1999

Teacher - Probability Topics and Martingales (Summer Seminar)

Teacher - Analytic Geometry, Calculus II, Linear Algebra

#### OCM (Colombian Mathematics Olympiads) 1992 - 1997

Trainer of the Colombian Team

# SUMMARY OF QUALIFICATIONS

**Computer Skills** Knowledge of programming languages: C++. Software packages: MS Office, MATLAB, Mathematica. Operating Systems: Windows XP, Unix, Linux. Optimization Software: Lipsol.

**Analytical Skills** Knowledge of financial models. Ability to price financial contracts, and to create hedging portfolios using these models

Languages Fluent in Spanish and English. Familiar with French and Italian.

#### **DISTINCTIONS**

Bronze medal in the XXXII International Math Olympiads Degree with honors in Mathematics, Los Andes University 1997

Holder of "MAZDA Foundation of Arts and Science" Fellowship 1997 - 1998 "Beca Cuarenta Años" Fellowship, Universidad de Los Andes 1992 – 1997

# **REFERENCES**

Professor Steven E. Shreve (412) 268-8484 shreve@cmu.edu Department of Mathematical Sciences, Carnegie Mellon University

Professor Javier Peña (412) 268-5799 jfp@andrew.cmu.edu

Graduate School of Industrial Administration, Carnegie Mellon University

Professor Dmitry Kramkov (412) 268-5912 kramkov@andrew.cmu.edu Department of Mathematical Sciences, Carnegie Mellon University