

# Table of Contents for MEMO/261/1262

## Time-Like Graphical Models

- ♦ Introduction
- Part 1. Construction and properties
  - ♦ Geometry of time-like graphs
  - ♦ Processes indexed by time-like graphs
  - ♦ Markov properties of processes indexed by TLG's
  - ♦ Filtrations, martingales and stopping times
- Part 2. Natural Brownian motion and the stochastic heat equation
  - ♦ Maximums of Gaussian processes
  - ♦ Random walk and stochastic heat equation reviewed
  - ♦ Limit of the natural Brownian motion on a rhombus grid
- Part 3. Processes on general and random time-like graphs
  - ♦ Non-simple TLG's
  - ♦ Processes on non-simple TLG's
  - ♦ Galton-Watson time-like trees and the Branching Markov processes
- Open questions and appendix
  - ♦ Open questions
  - ♦ Appendix A. Independence and processes
  - ♦ Acknowledgments
  - ♦ Bibliography
  - ♦ Index