

GROUP for ANALYSIS of PERFORMANCE in ECONOMICS and MANAGEMENT	GROUPE d' ANALYSE de la PERFORMANCE en ECONOMIE et MANAGEMENT
IFRESI (LILLE)	IAG (Louvain-la-Neuve)

Dear colleagues,

You are cordially invited to a seminar of GAPEM on May 26th 2004,  
14h00–17h00 at IFRESI, 2 rue des Cannoniers, Lille (FRANCE).  
This seminar is also part of the GREMARS cycle of seminars.

#### PROGRAM

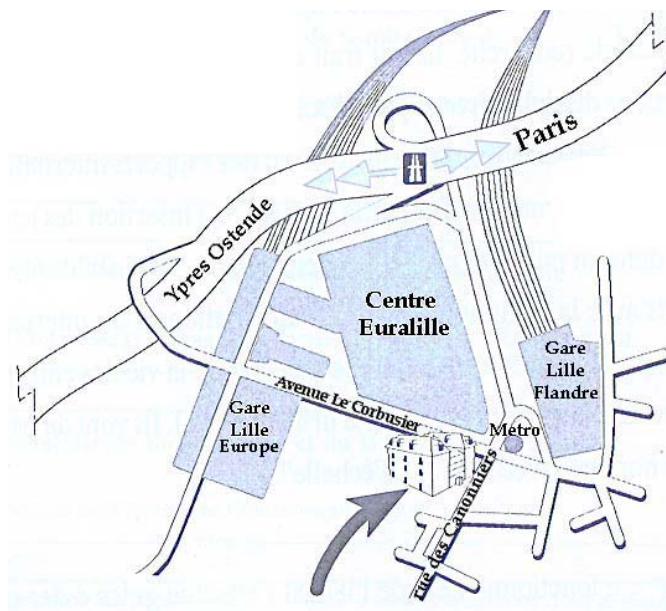
Robert G. Chambers

(University of Maryland & University of Western Australia)

The Precautionary Principle and Pareto Optimality in an Uncertain World

Co-author of this paper is Tigran Melkonyan (University of Maryland). An abstract is found on the next page. A brief list of recent publications of Prof. Chambers is also added.

For any additional information on this event, please do not hesitate to contact: [vandeneeckaut@univ-lille3.fr](mailto:vandeneeckaut@univ-lille3.fr)



# The Precautionary Principle and Pareto Optimality in an Uncertain World

R.G. Chambers & T. Melkonyan

## Abstract:

This paper examines the trade implications of the Precautionary Principle (PP) in an uncertain world where different decision makers have different attitudes towards ambiguity. We represent these attitudes towards ambiguity in terms of the maximin expected-utility (MMEU) specification. The MMEU model axiomatizes the intuitive proposition that Ellsberg behavior can be explained by individuals having too little information to form an exact prior. A central result is that in a simple two-country, general-equilibrium setting with both trading partners being ambiguity averse in this sense Pareto optimality requires that the less ambiguity averse partner (if the partners can be strictly ranked in such terms) absorb all the uncertainty in the economy and that the more ambiguity averse partner absorb none. An immediate corollary is that autarky can be Pareto optimal if the more ambiguity averse trading partner is also endowed with a degenerately uncertain technology.

Selection of publications of Prof. R.G. Chambers in the production area solely:

Chambers, R.G. (1998) Input and Output Indicators, in: R. Färe, S. Grosskopf, R. Russell (eds) *Index Numbers: Essays in Honour of Sten Malmquist*, Boston, Kluwer, 241–271.

- Chambers, R.G. (2002) Exact Nonradial Input, Output, and Productivity Measurement, *Economic Theory*, 20(4), 751–765.
- Chambers, R.G., Y. Chung, R. Färe (1998) Profit, Directional Distance Functions, and Nerlovian Efficiency, *Journal of Optimization Theory and Applications*, 98(2), 351–364.
- Chambers, R.G., R. Färe (1998) Translation Homotheticity, *Economic Theory*, 11(3), 629–641.
- Chambers, R.G., E. Lichtenberg (1996) A Nonparametric Approach to the Von Liebig–Paris Technology, *American Journal of Agricultural Economics*, 78(2), 373–386.
- Chambers, R.G., J. Quiggin (2000) *Uncertainty, Production, Choice, and Agency: The State–Contingent Approach*, NY, CUP.