marichal

From:"jenny" <jenny@math.byu.edu>To:<faculty@math.byu.edu>; <grads@math.byu.edu>Sent:Tuesday, November 20, 2001 2:12 PMSubject:Colloquium MondayAs a reminder there is a colloquium on Monday. Jean-Luc is visiting our
department and has applied for a permanent position.Below is the Title and Abstract for his talk.

COLLOQUIUM

JEAN-LUC MARICHAL MATHEMATICS DEPARTMENT

will speak on

"Aggregation functions for multicriteria decision aid"

Monday, November 26 4:00 pm; Rm 301 TMCB

Abstract: In many domains we are faced with the problem of aggregating a collection of numerical readings to obtain a so-called mean or typical value. The main object of this talk deals with the aggregation procedures used in multicriteria decision making problems. In such problems, values to be aggregated are gathered in a score table and represent evaluations of alternatives according to various criteria. Aggregation operators are proposed to obtain a global score for each alternative taking into account the given criteria. These global scores are then exploited to establish are commendation or prescription. In many problems it is important to take into consideration the interaction between criteria. Until recently, criteria were supposed to be independent and the aggregation operator which was often used was the weighted arithmetic mean, with all its well-known drawbacks. Such an operator is not suitable when interacting criteria are considered. However, this problem has been overcome by the contribution of fuzzy integrals, such as the Choquet and Sugeno integrals.