**Meeting:** 1000, Albuquerque, New Mexico, SS 4A, Special Session on Financial Mathematics: The Mathematics of Derivative Securities

1000-90-173 **Greg Anderson**, **Lisa Goldberg** and **Alec Kercheval*** (kercheva@zeno.math.fsu.edu), Department of Mathematics, Florida State, University, Tallahessee, FL 32306, and **Guy Miller** and **Kathy Sorge**. *Consistent aggregation of risk factor models.*

A single investment firm may contain multiple managers or trading desks, each with its own market and special features. Each manager, in seeking to maximize risk adjusted return, will need a risk model for asset covariances. How can the overall firm quantify it's total firm-wide risk in a practical and consistent way? We describe a family of solutions parametrized by the orthogonal group. This leads to an optimization problem which is a generalization of the Orthogonal Procrustes Problem. We illustrate with some numerical results using international corporate bond data. (Received August 23, 2004)