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LINEAR ALGEBRA
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Preface

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This is the seventh in the series of Special Issues on Linear Algebra and Statistics of *Linear Algebra and Its Applications*. The first six issues were:

1. vols. 67 (June 1985), 70 (October 1985) and 82 (October 1986, pp. 143–279), Ingram Olkin, C. Radhakrishna Rao and George P.H. Styan, eds.;
2. vol. 127 (January 1990), Michael D. Perlman, Friedrich Pukelsheim and George P.H. Styan, eds.;
3. vol. 176 (November 1992), Jerzy K. Baksalary and George P.H. Styan, eds.;
4. vol. 210 (October 1994), Jeffrey J. Hunter, Simo Puntanen and George P.H. Styan, eds.;
5. vol. 237/238 (April 1996), R.B. Bapat, George P.H. Styan and Hans Joachim Werner, eds.;
6. vol. 264 (October 1997), R. William Farebrother, Simo Puntanen, George P.H. Styan and Hans Joachim Werner, eds.

The impact of linear algebra on statistics continues at a substantial level, and there are now available several books devoted entirely to linear and matrix algebra for statistics, and a number of other statistical books in which linear and matrix algebra play a major role.

This Seventh Special Issue on Linear Algebra and Statistics contains papers on linear algebra and matrix theory and their applications to statistics and probability, as well as on certain linear-algebraic and matrix-theoretic methods associated with statistics and probability.

The 25 research papers in this Seventh Special Issue include some which were presented at the Sixth International Workshop on Matrices and Statistics (Istanbul, Turkey: August 16–17, 1997); these papers involve the following topics: ANOVA, biased estimation, factor analysis, Fréchet distance, Gauss–Markov model, generalized inverses, Gibbs sampler, Grassmann manifolds, growth curve models, Hadamard products, Jacobi polynomials, Khatri–Rao product, least-squares estimation, linear models, linear regression, linear restrictions, Markov systems, matrix theory, matrix inequalities, multivariate data analysis, oblique projectors, orthogonal projectors, partial orderings, polar decomposition, principal components, products of projectors, rank additivity, rank reduction, rank subtractivity, Schur products, spherical functions, Tracy–Singh product.

The Eighth Special Issue on Linear Algebra and Statistics of Linear Algebra and Its Applications is in progress, edited by Simo Puntanen, George P.H. Styan and Hans Joachim Werner. We expect that this Eighth Special Issue will contain some papers presented at The Seventh International Workshop on Matrices and Statistics in Celebration of T.W. Anderson’s 80th Birthday (Fort Lauderdale, Florida: December 11–14, 1998).