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PREFACE

This issue contains the research papers presented at the North Atlantic Treaty Organization Advanced Study Institute (NATO ASI) and National Science Foundation (NFS) conference on special functions held at Arizona State University from May 29 until June 9, 2000.

The conference covered a very broad spectrum of topics bound by their connection to special functions either through the development of the theory of special functions or the applications of special functions to other disciplines. As such, the papers will appeal to a wide audience of mathematical and applied analysts, combinatorialists, mathematical physicists, and geometers.

The research papers contained herein represent a cross section of the current research activity in special functions and orthogonal polynomials. We have been fortunate to receive so many interesting papers; some of them are topics of very recent vintage, such as elliptic special functions, Dunkl operators and Terwilliger algebra. More traditional topics such as summation theorems, identities, specific integral transforms, q-orthogonal polynomials, differential and q-difference equations and harmonic analysis are also covered. The meeting had several presentations on computer algebra but only Ciuci and Krattenthaler submitted a paper to the proceedings where use of computer algebra was made to evaluate a determinantal identity.

These papers are companions to the mostly survey and instructional articles which have already appeared in:

J. Bustoz, M.E.H. Ismail and S.K. Suslov, *Special functions* 2000, *Current perspectives and future directions*, Kluwer, Dorchester, 2001.

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In preparing the program for the NATO ASI AND NSF conference, we tried to make special functions the focal point of a very diversified