

NUCLEAR SCIENCE AND ENGINEERING®

VOLUME 123, NUMBER 3, JULY 1996

CONTENTS

vii	Editorial	<i>Dan G. Cacuci</i>
ix	Foreword: Mathematics and Computations, Reactor Physics, and Environmental Analyses	<i>Laural L. Briggs</i>

TECHNICAL PAPERS

319	A Three-Dimensional Time-Dependent Unstructured Tetrahedral-Mesh SP_N Method	<i>J. E. Morel, J. M. McGhee, Edward W. Larsen</i>
328	Asymptotic Derivation of the Multigroup P_1 and Simplified P_N Equations with Anisotropic Scattering	<i>Edward W. Larsen, J. E. Morel, John M. McGhee</i>
343	Asymptotic Derivation of the Fermi Pencil-Beam Approximation	<i>Christoph Börgers, Edward W. Larsen</i>
358	Application of the B_n Theory to Unit Cell Calculations	<i>R. Roy</i>
369	Variational Nodal Transport Perturbation Theory	<i>Kirsten F. Laurin-Kovitz, E. E. Lewis</i>
381	Solution of Mathematical Adjoint Equation for a Higher Order Nodal Expansion Method	<i>Taek Kyum Kim, Chang Hyo Kim</i>
392	Collision Probability Calculation and Multigroup Flux Solvers Using PVM	<i>A. Qaddouri, R. Roy, M. Mayrand, B. Goulard</i>
403	An Incomplete Domain Decomposition Preconditioning Method for Nonlinear Nodal Kinetics Calculations	<i>Han Gyu Joo, Thomas J. Downar</i>
415	A Domain Decomposition Method for Nonlinear Steady-State Flow Computations	<i>Sébastien Clerc</i>
421	Moving-Particle Semi-Implicit Method for Fragmentation of Incompressible Fluid	<i>S. Koshizuka, Y. Oka</i>
435	Kalman Filter Application for Distributed Parameter Estimation in Reactor Systems	<i>Robert P. Martin, Robert M. Edwards</i>
443	Flow Modeling in Heterogeneous Media in the Context of Geologic Nuclear Waste Repositories	<i>Budhi Sagar</i>