

Recent volumes in MSJ Memoirs

1	Ivan Cherednik, Peter J. Forrester and Denis Uglov , Quantum many-body problems and representation theory, 1998	JPY4000
2	Masako Takahashi, Mitsuhiro Okada and Mariangiola Dezani-Ciancaglini (Eds.) , Theories of types and proofs, 1998	JPY5800
3	Tomotada Ohtsuki , Combinatorial quantum method in 3-dimensional topology, 1999	JPY2000
4	Atsushi Matsuo and Kiyokazu Nagatomo , Axioms for a vertex algebra and the locality of quantum fields, 1999	JPY2000
5	Daryl Cooper, Craig D. Hodgson and Steven P. Kerckhoff , Three-dimensional orbifolds and cone-manifolds, 2000	JPY2800
6	Kong De-xing , Cauchy problem for quasilinear hyperbolic systems, 2000	JPY4000
7	Vladimir Georgiev , Semilinear hyperbolic equations, 2000	JPY4000
8	Eric M. Opdam , Lecture notes on Dunkl operators for real and complex reflection groups, 2000	JPY1500
9	Peter Orlik and Hiroaki Terao , Arrangements and hyper-geometric integrals, 2001	JPY1900
10	Yuri G. Prokhorov , Lectures on complements on log surfaces, 2001	JPY2500
11	John R. Stembridge, Jean-Yves Thibon, Marc A. A. van Leeuwen , Interaction of combinatorics and representation theory, 2001	JPY2400
12	Yves André , Period mappings and differential equations. From \mathbb{C} to \mathbb{C}_p , 2003	JPY4500
13	Shigeaki Koike , A beginner's guide to the theory of viscosity solutions, 2004	JPY2191
14	Noboru Nakayama , Zariski-decomposition and Abundance, 2004 ..	JPY4286
15	Valery Alexeev and Viacheslav V. Nikulin , Del Pezzo and K3 surfaces, 2006	JPY2857
16	Brian H. Bowditch , A course on geometric group theory, 2006	JPY1524
17	Arkady Berenstein, David Kazhdan, Cédric Lecouvey, Masato Okado, Anne Schilling, Taichiro Takagi and Alexander Veselov , Combinatorial Aspect of Integrable Systems, 2007	JPY2286
18	Yasutaka Ihara , On Congruence Monodromy Problems, 2008	JPY2667
19	Joseph Najnudel, Bernard Roynette and Marc Yor , A Global View of Brownian Penalisations, 2009	JPY1733

20	Danny Calegari , scl(Stable Commutator Length), 2009	JPY3095
21	Gautami Bhowmik, Kohji Matsumoto and Hirofumi Tsumura (Eds.) , Algebraic and Analytic Aspects of Zeta Functions and L -functions, 2010	JPY2781
22	Michael Ruzhansky and James Smith , Dispersive and Strichartz estimates for hyperbolic equations with constant coefficients, 2010 ...	JPY2352

**Dispersive and Strichartz estimates for
hyperbolic equations with constant coefficients**

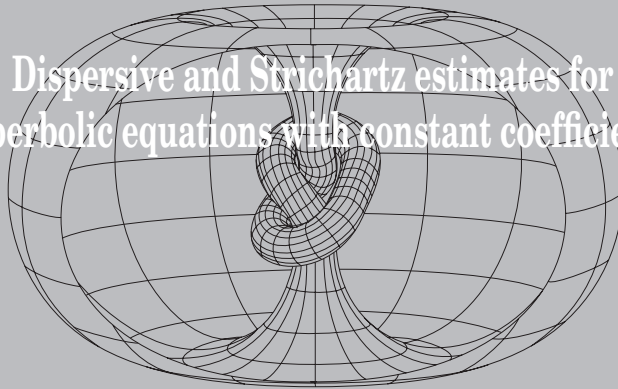
Michael Ruzhansky and James Smith

MSJ Memoirs, Vol. 22

MSJ Memoirs

Mathematical Society of Japan

Dispersive and Strichartz estimates for
hyperbolic equations with constant coefficients



Michael Ruzhansky and James Smith



Volume 22

2010

Michael Ruzhansky
Department of Mathematics
Imperial College London
180 Queen's Gate
London, SW7 2AZ
United Kingdom

James Smith
Department of Mathematics
Imperial College London
180 Queen's Gate
London, SW7 2AZ
United Kingdom

2000 Mathematics Subject Classifications:
35L30, 35L45, 42B20, 42B37, 35L75, 35S30

MSJ Memoirs

This monograph series is intended to publish lecture notes, graduate textbooks and long research papers* in pure and applied mathematics. Each volume should be an integrated monograph. Proceedings of conferences or collections of independent papers are not accepted.

Articles for the series can be submitted to one of the editors in the form of hard copy. When the article is accepted, the author(s) is (are) requested to send a camera-ready manuscript.

* limited to contributions by MSJ members

Editorial Board

Ariki, Susumu Furuta, Mikio Hayashi, Nakao
Kaneko, Masanobu Kojima, Sadayoshi Kuniba, Atsuo
Miyaoka, Yoichi Namikawa, Yoshinori Noguchi, Junjiro
Ochiai, Hiroyuki Okamoto, Hisashi Takayama, Nobuki
Taniguchi, Setsuo (Chief Editor/Managing Editor)
Yamaguchi, Takao Yanagida, Eiji Yoshida, Nakahiro

The series *MSJ Memoirs* is occasionally (3–5 volumes each year) published by the Mathematical Society of Japan. The titles and prices of recent volumes are listed on page i of this volume. Each volume of the series can be separately purchased by placing an order with:

- The Mathematical Society of Japan, 1–34–8 Taito, Taito-ku, 110-0016 Tokyo, Japan (from inside Japan)
- World Scientific Publishing, 5 Thoh Tuck Link, Singapore 596224 (from outside Japan)

© 2010 by the Mathematical Society of Japan. All rights reserved.