# Contemporary Mathematics

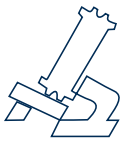
699

## Israel Mathematical Conference Proceedings

# Complex Analysis and Dynamical Systems VII

Seventh International Conference
Complex Analysis and Dynamical Systems
May 10–15, 2015
Nahariya, Israel

Mark L. Agranovsky
Matania Ben-Artzi
Catherine Bénéteau
Lavi Karp
Dmitry Khavinson
Simeon Reich
David Shoikhet
Gilbert Weinstein
Lawrence Zalcman
Editors



**American Mathematical Society**
Providence, Rhode Island

**Bar-Ilan University**
Ramat-Gan, Israel

Complex Analysis and Dynamical Systems VII

# Contemporary Mathematics

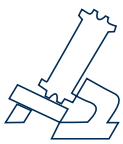
699

## Israel Mathematical Conference Proceedings

# Complex Analysis and Dynamical Systems VII

Seventh International Conference
Complex Analysis and Dynamical Systems
May 10–15, 2015
Nahariya, Israel

Mark L. Agranovsky
Matania Ben-Artzi
Catherine Bénéteau
Lavi Karp
Dmitry Khavinson
Simeon Reich
David Shoikhet
Gilbert Weinstein
Lawrence Zalcman
Editors



**American Mathematical Society**
Providence, Rhode Island

**Bar-Ilan University**
Ramat-Gan, Israel

**EDITORIAL COMMITTEE**

Dennis DeTurck, managing editor

Michael Loss  Kailash Misra  Catherine Yan

**Editorial Board of Israel Mathematical Conference Proceedings**

Louis Rowen, *Bar-Ilan University*, managing editor

Z. Arad, *Netanya Academic College*
J. Bernstein, *Tel-Aviv University*
H. Furstenberg, *Hebrew University*
S. Gelbart, *Weizmann Institute*
V. Gol′dshtein, *Ben-Gurion University*
M. Katz, *Bar-Ilan University*
L, Small, *University of California at San Diego*
L. Zalcman, *Bar-Ilan University*

Miriam Beller, *Technical Editor*

2010 *Mathematics Subject Classification.* Primary 26-XX, 30-XX, 31-XX, 34-XX, 35-XX, 41-XX, 42-XX, 47-XX, 53-XX, 76-XX, 94-XX.

**Library of Congress Cataloging-in-Publication Data**

Names: International Conference on Complex Analysis and Dynamical Systems (7th : 2015 : Nahariyah, Israel) | Agranovsky, M. L. (Mark L'vovich), editor. | Ben-Artzi, Matania, 1948- editor. | Bénéteau, Catherine, 1960– editor. | Karp, Lavi, 1955– editor. | Khavinson, Dmitry, 1956– editor. | Reich, Simeon, editor. | Shoikhet, David, 1953– editor. | Weinstein, Gilbert, 1957– editor. | Zalcman, Lawrence Allen, editor.

Title: Israel mathematical conference proceedings : complex analysis and dynamical systems VII : seventh International Conference on Complex Analysis and Dynamical Systems, May 10–15, 2015, Nahariya, Israel / Mark L. Agranovsky, Matania Ben-Artzi, Catherine Bénéteau, Lavi Karp, Dmitry Khavinson, Simeon Reich, David Shoikhet, Gilbert Weinstein, Lawrence Zalcman, editors.

Other titles: Complex analysis and dynamical systems VII

Description: Providence, Rhode Island : American Mathematical Society ; Ramat Gan, Israel : Bar-Ilan University, [2017] | Series: Contemporary mathematics ; volume 699 | Includes bibliographical references.

Identifiers: LCCN 2017015043 | ISBN 9781470429614 (alk. paper)

Subjects: LCSH: Functions of complex variables–Congresses. | Calculus of variations–Congresses. | Numerical analysis–Congresses. | Differential equations–Congresses. | Mappings (Mathematics)–Congresses. | AMS: Real functions. msc | Functions of a complex variable. msc | Potential theory. msc | Ordinary differential equations. msc | Partial differential equations. msc | Approximations and expansions. msc | Harmonic analysis on Euclidean spaces. msc | Operator theory. msc | Differential geometry. msc | Fluid mechanics. msc | Information and communication, circuits. msc

Classification: LCC QA331.7 .I58 2015 | DDC 515/.9–dc23 LC record available at https://lccn.loc.gov/2017015043

Contemporary Mathematics ISSN: 0271-4132 (print); ISSN: 1098-3627 (online)

DOI: `http://dx.doi.org/10.1090/conm/699`

**Copying and reprinting.** Material in this book may be reproduced by any means for educational and scientific purposes without fee or permission with the exception of reproduction by services that collect fees for delivery of documents and provided that the customary acknowledgment of the source is given. This consent does not extend to other kinds of copying for general distribution, for advertising or promotional purposes, or for resale. Requests for permission for commercial use of material should be addressed to the Managing Editor, IMCP, Department of Mathematics, Bar-Ilan University, Ramat-Gan, 52900 Israel. Requests can also be made by email to `rowen@macs.biu.ac.il`.

Excluded from these provisions is material in articles for which the author holds copyright. In such cases, requests for permission to use or reprint should be addressed directly to the author(s). (Copyright ownership is indicated in the notice in the lower right-hand corner of the first page of each article.)

© 2017 by Bar-Ilan University. Printed in the United States of America.

⊗ The paper used in this book is acid-free and falls within the guidelines established to ensure permanence and durability.
Visit the AMS home page at `http://www.ams.org/`

10 9 8 7 6 5 4 3 2 1  22 21 20 19 18 17

## Contents


Preface vii

Conference Program ix

List of Participants xv

Accuracy of reconstruction of spike-trains with two near-colliding nodes
A. Akinshin, G. Goldman, V. Golubyatnikov, and Y. Yomdin 1

Exact solutions to a Muskat problem with line distributions of sinks and sources
L. Akinyemi, T. V. Savina, and A. A. Nepomnyashchy 19

Modulus of families of walks on graphs
N. Albin, F. Darabi Sahneh, M. Goering, and P. Poggi-Corradini 35

Uniqueness of contact Hamiltonians of topological strictly contact isotopies
A. Banyaga and P. Spaeth 57

A triple principle (for curves, surfaces and complex functions) and the universal version of value distribution theory
G. Barsegian 67

Characterization of orthogonal polynomials—A new proof of Bochner's theorem
R. Díaz Millán and A. Gibali 87

Decomposition of the Kostlan–Shub–Smale model for random polynomials
V. Gichev 103

Differentiability of ring homeomorphisms with controlled $p$-module
A. Golberg and R. Salimov 121

Some inequalities for holomorphic self-maps of the unit disc with two fixed points
V. V. Goryainov 129

Interpolation and cubature at Geronimus nodes generated by different Geronimus polynomials
L. A. Harris 137

Characterizations to the fractional Sobolev inequality
R. Hurri-Syrjänen and A. V. Vähäkangas 145

Elliptic perturbations of dynamical systems with a proper node
L. A. Kalyakin, O. A. Sultanov, and N. Tarkhanov 155

Krull dimensions of rings of holomorphic functions
M. Kapovich 167

Complex geodesics and variational calculus for univalent functions
S. L. Krushkal 175

Analytic reflection across analytic Jordan curves
R. Kühnau 199

Compositions of polyharmonic mappings
G. Liu and S. Ponnusamy 209

On Marcinkiewicz-Zygmund inequalities at Jacobi zeros and their Bessel function cousins
D. S. Lubinsky 223

Nonminimal cyclic invariant subspaces of hyperbolic composition operators
V. Matache 247

An improved defect relation for holomorphic curves in projective varieties
C. Mills and M. Ru 263

A porosity theorem for a class of nonexpansive set-valued mappings
S. Reich and A. J. Zaslavski 275

The Khavinson-Shapiro conjecture for domains with a boundary consisting of algebraic hypersurfaces
H. Render 283

Shadow problem for the tangent bundle of straight lines on a sphere
Yu. B. Zelinskii 291

# Preface

The Seventh International Conference on Complex Analysis and Dynamical Systems (CA&DS VII), sponsored by ORT Braude College (Karmiel, Israel), Bar-Ilan University (Ramat-Gan, Israel) and the University of South Florida (Tampa, FL, USA), took place at the Carlton Hotel, Nahariya, Israel, during May 10–15, 2015. The conference was dedicated to the tenth anniversary of the Galilee Research Center for Applied Mathematics. The conference was devoted to the interaction between various branches of Mathematical Analysis and was organized into three main parallel sessions: Complex Analysis, Geometry and Harmonic Analysis, and Partial Differential Equations. Altogether, 102 participants from 21 countries attended the conference.

These proceedings are the tangible record of the conference. Most of the papers collected here have been contributed by participants in the conference. In some cases, they have chosen to submit manuscripts which depart from the texts of their lectures. Several invited speakers who were unable to attend the conference also contributed papers to these proceedings. All submissions have been carefully refereed. They testify to the continued vitality of the interplay between classical and modern analysis.

We acknowledge with thanks the support provided for the conference by the Emmy Noether Research Institute for Mathematics of Bar-Ilan University, the Galilee Research Center for Applied Mathematics of ORT Braude College, the Gelbart Research Institute for Mathematical Sciences of Bar-Ilan University, the Hebrew University, ISAAC—the International Society for Analysis, its Applications and Computations, and the U.S. National Science Foundation. Finally, we thank Miriam Beller, who (as in previous volumes) served as technical editor.

The Editors

## Conference Program

*May 10 – May 15, 2015, Nahariya, Israel*

**Sunday - May 10, 2015**

15:00 - 19:00 Registration and informal mathematical discussions

**Monday - May 11, 2015**

10:40 - 11:25 Plenary Lecture 1
Haim Brezis, *From the characterization of constant functions to isoperimetric inequalities*

**Morning Session 1**: Complex Analysis

12:20 - 12:50 Daoud Bshouty, *The local Bieberbach problem for univalent functions revisited*
12:50 - 13:20 Vladimir Dubinin, *Some applications of the circular symmetrization to the multivalent functions*

**Morning Session 2**: Geometry and Harmonic Analysis

11:50 - 12:20 Michael Demuth, *On eigenvalues of linear operators in Banach spaces*
12:20 - 12:50 Brian Simanek, *Paraorthogonal polynomials and electrostatics on the unit circle*
12:50 - 13:20 Elijah Liflyand, *On theorems of F. and M. Riesz*

**Morning Session 3**: Partial Differential Equations

11:50 - 12:20 Massimo Lanza de Cristoforis, *Composition operators and analytic families of potentials*
12:50 - 13:20 Jonathan Ben-Artzi, *The spectral measure of vector fields and uniform ergodic theorems*
14:30 - 15:15 Plenary Lecture 2
Augustin Banyaga, *On $C^0$ rigidity theorems and uniqueness of generators of some topological isotopies*
15:20 - 16:05 Plenary Lecture 3
Eitan Tadmor, *Consensus and the emergence of leaders in social dynamics*

**Afternoon Session 1**: Complex Analysis

16:40 - 17:10 Konstantin Dyakonov, *Functions in Bloch-type spaces and their moduli*
17:10 - 17:40 Alexey Tochin, *Coupling of Gaussian free field with slit holomorphic stochastic*

**Afternoon Session 2**: Geometry and Harmonic Analysis

16:40 - 17:10 Tadeusz Kuczumow, *Properties of the Kobayashi distance and their applications*
17:10 - 17:40 Alexander Rashkovskii, *When the poles collide*
17:40 - 18:10 Alexander M. Kytmanov, *On one boundary analogous of the Hartogs theorem*

**Afternoon Session 3**: Partial Differential Equations

16:40 - 17:10 Samuel L. Krushkal, *Complex geodesics and variational calculus for univalent functions*
17:10 - 17:40 Anatoly Golberg, *Absolute continuity on paths of open discrete mappings in higher dimensions and related inequalities*

**Tuesday - May 12, 2015**

09:00 - 09:45 Plenary Lecture 4
Gui-Qiang Chen, *Weak continuity and compactness for nonlinear partial differential equations*
09:50 - 10:35 Plenary Lecture 5
Gady Kozma, *An introduction to Menshov representations*

**Morning Session 1**: Complex Analysis

11:00 - 11:30 Manuel D. Contreras, *Integral operators on $H^\infty$*
11:30 - 12:00 Catherine Bénéteau, *Optimal approximants in Dirichlet spaces*

**Morning Session 2**: Geometry and Harmonic Analysis

11:00 - 11:30 Peter Spaeth, *Topological dynamics on strictly contact manifolds*
11:30 - 12:00 Gabriel Ben-Simon, *Group action via quasi-isometries and its space of quasi-morphisms*

**Morning Session 3**: Partial Differential Equations

11:00 - 11:30 Michael Reissig, *Semi-linear classical damped wave models with time-dependent speed of propagation and dissipation*
11:30 - 12:00 Hermann Render, *Fischer operators and the Khavinson-Shapiro conjecture*

**Wednesday - May 13, 2015**

09:00 - 09:45 Plenary Lecture 6
Vladimir Maz'ya, *Sobolev inequalities in arbitrary domains*
09:50 - 10:35 Plenary Lecture 7
Mikhail Sodin, *Entire functions of exponential type represented by pseudo-random and random Taylor series*

**Morning Session 1**: Complex Analysis

11:00 - 11:30 Dmitry Khavinson, *Approximating $z^*$ by analytic functions*
11:30 - 12:00 Victor V. Goryainov, *Loewner's method in the univalent function theory and angular derivative*
12:10 - 12:40 Arthur Danielyan, *On the zero-free polynomial approximation problem*
12:40 - 13:10 Igor Chyzhykov, *On the growth of p-means of analytic functions of finite order in the unit disc*

**Afternoon Session 1**: Complex Analysis

14:30 - 15:30 Jozef Zając, *The Schwarz type inequalities for harmonic mappings boundary normalization*
16:00 - 16:30 Pavel Gumenyuk, *Quasiconformal extensions via the chordal Loewner equation*

**Morning Session 2**: Geometry and Harmonic Analysis

11:00 - 11:30 Boris Rubin, *Inversion formulas for the horospherical transform*
11:30 - 12:00 Mary Kloc, *Smooth Hamiltonian systems with soft impacts*
12:10 - 12:40 Yosef Yomdin, *Taylor domination, recurrences, and (s; p)-valent functions*
12:40 - 13:10 Jonathan Arazy, *Spectral properties of operators which generalize invariant Laplacians*

**Afternoon Session 2**: Geometry and Harmonic Analysis

14:30 - 15:00 Victor M. Gichev, *Comparison of the expectations of nodal volumes for different invariant random polynomials*
15:00 - 15:30 Nelia Charalambous, *The Weyl criterion for the spectrum*
16:00 - 16:30 Mikhail Zaidenberg, *On the Zariski cancellation problem*
16:30 - 17:00 Yuri Zelinskii, *Shadows problems and generalised convexity*

**Morning Session 3**: Partial Differential Equations

11:00 - 11:30 Marshall Slemrod, *The problem with Hilbert's 6th problem*
11:30 - 12:00 Tomio Umeda, *Schrödinger operators with n positive eigenvalues: an explicit construction involving complex valued potentials*
12:10 - 12:40 David Fajman, *The Einstein flow with a positive cosmological constant*
12:40 - 13:10 Gilbert Weinstein, *The Positive mass theorem for multiple rotating charged black holes*

**Afternoon Session 3**: Partial Differential Equations

14:30 - 15:00 Eugenia Malinnikova, *Uniqueness results for discrete Schrödinger evolutions*
15:00 - 15:30 Marius Ghergu, *Pointwise bounds and arbitrarily large solutions for nonlocal elliptic systems*
16:00 - 16:30 Marina Prokhorova, *The index theorem for self-adjoint elliptic operators with local boundary conditions*
16:30 - 17:00 Vladimir P. Golubyatnikov, *Topological characteristics of phase portraits of some kinetic non-linear dynamical systems*
17:00 - 17:30 Leonid Zelenko, *Virtual bound levels in a gap of the essential spectrum of the Schrödinger operator with a weakly perturbed periodic potential*

**Thursday - May 14, 2013**

09:00 - 09:45 Plenary Lecture 8
Peter Kuchment, *Can one hear the heat of the body?*
09:50 - 10:35 Plenary Lecture 9
A. Iosevich, *The Fuglede Conjecture holds in two dimensional vector spaces over prime fields*

**Morning Session 1**: Complex Analysis

11:00 - 11:30 Santiago Díaz-Madrigal, *Slope problems in the theory of analytic semigroups*
11:30 - 12:00 Erik Lundberg, *Wilmshurst's conjecture and random harmonic polynomials*
12:10 - 12:40 Alekos Vidras, *Bergman-Weyl expansion for holomorphic functions in a bounded domain $U \subset C$ with $C^1$ boundary*
12:40 - 13:10 Monika Budzyńska, *Around the Wolff-Denjoy theorem*

**Afternoon Session 1**: Complex Analysis

14:30 - 15:00 Nikolai Vasilevski, *Commutative algebras of Toeplitz operators on the unit ball*
15:00 - 15:30 Lev Aizenberg, *Application of the multidimensional logarithmic residue to present in the form of an integral the difference between the number of the lattice points in a domain in $R^n$ and its volume*
16:00 - 16:30 Pauline Mellon, *Iteration theory on bounded symmetric domains and an extension of Hervé's theorem*

**Morning Session 2**: Geometry and Harmonic Analysis

11:00 - 11:30 Vladimir Rovenski, *Prescribing mixed curvature of foliated Riemann-Cartan spaces*
11:30 - 12:00 Chong-Kyu Han, *Invariant submanifolds for systems of vector fields of constant rank*
12:10 - 12:40 Ognyan Kounchev, *Klein-Dirac quadric in approximation theory, moment problem and potential theory*
12:40 - 13:10 Nir Lev, *Sampling on quasicrystals*

**Afternoon Session 2**: Geometry and Harmonic Analysis

14:30 - 15:00 Jurij Kozicki, *Coalescing jump dynamics in the continuum*
15:00 - 15:30 Jaroslav Ilnytskyi, *Computer simulations of stochastic models on a graph for the non-immune disease spread*
16:00 - 16:30 Mikhailo Kozlovskii, *Calculating the grant partition function of a fluid model*
16:30 - 17:00 Yuri I. Kharkevych, *The saturation of the Weierstrass integral*
17:00 - 17:30 Kirill G. Kamalutdinov, *On the intersection of fractal curves*

**Morning Session 3**: Partial Differential Equations

11:00 - 11:30 Edriss S. Titi, *Global well-posedness of an inviscid three-dimensional pseudo- Hasegawa-Mima-Charney-Obukhov model*
11:30 - 12:00 Roland Duduchava, *Mellin convolution equations in Bessel potential spaces*
12:10 - 12:40 Ritva Hurri-Syrjanen, *On the function space, which is larger than the BMO space, and was also introduced by John and Nirenberg*
12:40 - 13:10 Vladimir Gol'dshtein, *Estimates of the Neumann-Laplace operator first eigenvalue for conformal regular domains*

**Afternoon Session 3**: Partial Differential Equations

14:30 - 15:00 Yanqiu Guo, *Backward behavior of dissipative evolution equations*
15:00 - 15:30 Gershon Kresin, *Invariant convex bodies for strongly elliptic systems*
16:00 - 16:30 Simon Gindikin, *Cohomological Laplace transform*
16:30 - 17:00 Jinkai Li, *The primitive equations with partial dissipation*

**Friday - May 15, 2015**

09:00 - 09:45 Plenary Lecture 10
Svitlana Mayboroda, *Localization of the eigenfunctions and associated free boundary problems*
09:50 - 10:35 Plenary Lecture 11
Michael Entov, *Connecting trajectories of Hamiltonian flows*
11:00 - 11:45 Plenary Lecture 12
Filippo Bracci, *Univalent mappings in higher dimension*

## List of Participants

M. Agranovsky
Bar-Ilan University, Israel

D. Aharonov
Technion - Israel Institute of Technology, Israel

L. Aizenberg
Bar-Ilan University, Israel

J. Arazy
Haifa University, Israel

Z. Balogh
University of Bern, Switzerland

R. Band
Technion - Israel Institute of Technology, Israel

A. Banyaga
Pennsylvania State University, USA

J. Ben-Artzi
Imperial College, United Kingdom

M. Ben-Artzi
Hebrew University, Israel

C. Bénéteau
University of South Florida, USA

G. Ben-Simon
ORT Braude College, Israel

F. Bracci
Università di Roma "Tor Vergata", Italy

H. Brezis
Technion - Israel Institute of Technology, Israel & Rutgers University, USA

D. Bshouty
Technion - Israel Institute of Technology, Israel

M. Budzyńska
Uniwersytet Marii Curie-Sklodowskiej w Lublinie, Poland

N. Charalambous
University of Cyprus, Cyprus

G. Q. Chen
Oxford University, United Kingdom

I. Chyzhykov
Lviv National University, Ukraine

M. D. Contreras
Universidad de Sevilla, Spain

A. Danielyan
University of South Florida, USA

M. Demuth
Clausthal University of Technology, Germany

S. Díaz-Madrigal
Universidad de Sevilla, Spain

V. Dubinin
Far Eastern Federal University, Russia

R. Duduchava
A. Razmadze Mathematical Institute, Georgia

A. Dyachenko
Berlin Institute of Technology, Germany

K. Dyakonov
ICREA and Universitat de Barcelona, Spain

M. Elin
ORT Braude College, Israel

M. Entov
Technion - Israel Institute of Technology, Israel

D. Fajman
University of Vienna, Austria

M. Fleeman
University of South Florida, USA

S. Gerlinde
University of Bremen, Germany

M. Ghergu
University College Dublin, Ireland

A. Gibali
ORT Braude College, Israel

V. Gichev
Novosibirsk State University, Russia

S. Gindikin
Rutgers University, USA

A. Golberg
Holon Institute of Technology, Israel

V. Golubyatnikov
Novosibirsk State University, Russia

V. Goryainov
Moscow Institute of Physics and Technology, Russia

R. Grinfeld
Bar-Ilan University, Israel

P. Gumenyuk
University of Stavanger, Norway

Y. Guo
Weizmann Institute of Science, Israel

C. K. Han
Seoul National University, Korea

C. Hoff
Florida Atlantic University, USA

R. Hurri-Syrjänen
University of Helsinki, Finland

Y. Ilnytskyy
Institute for Condensed Matter Physics, Ukraine

F. Jacobzon
ORT Braude College, Israel

L. Karp
ORT Braude College, Israel

G. Katriel
ORT Braude College, Israel

Y. Kharkevych
Lesya Ukrainka Eastern European National University, Lutsk, Ukraine

V. Khatskevich
ORT Braude College, Israel

D. Khavinson
University of South Florida,USA

M. Kloc
Weizmann Institute of Science, Israel

O. Kounchev
IZKS, University of Bonn, Germany

J. Kozicki
Institute of Mathematics, Lublin, Poland

M. Kozlovskii
Institute for Condensed Matter Physics, Ukraine

G. Kozma
Weizmann Institute of Science, Israel

G. Kresin
Ariel University, Israel

S. Krushkal
Bar-Ilan University, Israel

P. Kuchment
Texas A&M University, USA

T. Kuczumow
Uniwersytet Marii Curie-Sklodowskiej w Lublinie, Poland

A. Kytmanov
Siberian Federal University, Russia

M. Lanza de Cristoforis
Università degli Studi di Padova, Italy

J. Leiterer
Humboldt-University Berlin, Germany

N. Lev
Bar-Ilan University, Israel

M. Levenshtein
ORT Braude College, Israel

J. Li
Weizmann Institute of Science, Israel

E. Liflyand
Bar-Ilan University, Israel

E. Lundberg
Florida Atlantic University, USA

Y. Lutsky
ORT Braude College, Israel

E. Malinnikova
Norges Teknisk-Naturvitenskapelige Universitet, Norway

S. Mayboroda
Minnesota University, USA

V. Mazya
Lindköping University, Sweden

P. Mellon
University College Dublin, Ireland

S. Myslivets
Siberian Federal University, Russia

D. Partyka
The State School of Higher Education in Chem, Poland

Y. Pinchover
Technion - Israel Institute of Technology, Israel

M. Prokhorova
Institiute of Mathematics and Mechanics of Ural Branch of RAS, Russia

A. Rashkovskii
University of Stavanger, Norway

S. Reich
Technion - Israel Institute of Technology, Israel

M. Reissig
TU Bergakademie Freiberg, Germany

H. Render
University College Dublin, Ireland

V. Rovenski
Haifa University, Israel

B. Rubin
Louisiana State University, USA

D. Shoikhet
ORT Braude College, Israel

P. Shvartsman
Technion - Israel Institute of Technology, Israel

B. Simanek
Vanderbilt Universiry, USA

M. Slemrod
University of Wisconsin-Madison, USA

M. Sodin
Tel Aviv University, Israel

P. Spaeth
E Global Research, USA

E. Tadmor
University of Maryland, USA

E. S. Titi
Weizmann Institute of Science, Israel, Texas A&M University, USA

A. Tochin
University of Bergen, Norway

T. Umeda
University of Hyogo, Japan

N. Vasilevski
Instituto Politecnico Nacional, Mexico

A. Vidras
University of Cyprus, Cyprus

G. Weinstein
Ariel University, Israel

Y. Yomdin
Weizmann Institute of Science, Israel

M. Zaidenberg
Institut Fourier, Grenoble, France

J. Zając
The State School of Higher Education
in Chelm, Poland

L. Zalcman
Bar-Ilan University, Israel

L. Zelenko
Haifa University, Israel

Y. Zelinskii
Ukrainian Academy of Science, Ukraine

CONM 699

Complex Analysis and Dynamical Systems VII • Agranovsky et al., Editors

This volume contains the proceedings of the Seventh International Conference on Complex Analysis and Dynamical Systems, held from May 10–15, 2015, in Nahariya, Israel.

The papers in this volume range over a wide variety of topics in the interaction between various branches of mathematical analysis. Taken together, the articles collected here provide the reader with a panorama of activity in complex analysis, geometry, harmonic analysis, and partial differential equations, drawn by a number of leading figures in the field. They testify to the continued vitality of the interplay between classical and modern analysis.

ISBN 978-1-4704-2961-4

CONM/699

AMS *on the* Web
www.ams.org

AMS/BIU