

# CONTEMPORARY MATHEMATICS

732

## Automorphic Forms and Related Topics

Building Bridges: 3rd EU/US Summer School and Workshop  
Automorphic Forms and Related Topics  
July 11–22, 2016  
University of Sarajevo, Sarajevo, Bosnia and Herzegovina

Samuele Anni  
Jay Jorgenson  
Lejla Smajlović  
Lynne Walling  
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2010 *Mathematics Subject Classification*. Primary 11Fxx, 11Mxx, 11Gxx, 14Gxx, 14Kxx, 22E45, 22E50, 22E55, 22E57, 32Nxx.

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

Names: EU-US Summer School and Workshop on Automorphic Forms and Related Topics (3rd : 2016 : Sarajevo, Bosnia and Herzegovina) | Anni, Samuele, 1985- editor. | Jorgenson, Jay, editor. | Smajlovic, Lejla, 1974- | Walling, Lynne, 1958- editor.

Title: Automorphic forms and related topics : building bridges : 3rd EU-US Summer School and Workshop on Automorphic Forms and Related Topics, July 11-22, 2016, University of Sarajevo, Sarajevo, Bosnia and Herzegovina / Samuele Anni, Jay Jorgenson, Lejla Smajlovic, Lynne Walling, editors.

Description: Providence, Rhode Island : American Mathematical Society, [2019] | Series: Contemporary mathematics ; volume 732 | Includes bibliographical references.

Identifiers: LCCN 2019005230 | ISBN 9781470435257 (alk. paper)

Subjects: LCSH: Automorphic forms--Congresses. | Automorphic functions--Congresses. | AMS: Number theory -- Discontinuous groups and automorphic forms -- Discontinuous groups and automorphic forms. msc | Number theory -- Zeta and  $L$ -functions: analytic theory -- Zeta and  $L$ -functions: analytic theory. msc | Number theory -- Arithmetic algebraic geometry (Diophantine geometry) -- Arithmetic algebraic geometry (Diophantine geometry). msc | Algebraic geometry -- Arithmetic problems. Diophantine geometry -- Arithmetic problems. Diophantine geometry. msc | Algebraic geometry -- Abelian varieties and schemes -- Abelian varieties and schemes. msc | Topological groups, Lie groups -- Lie groups -- Representations of Lie and linear algebraic groups over real fields: analytic methods. msc | Topological groups, Lie groups -- Lie groups -- Representations of Lie and linear algebraic groups over local fields. msc | Topological groups, Lie groups -- Lie groups -- Representations of Lie and linear algebraic groups over global fields and adèle rings. msc | Topological groups, Lie groups -- Lie groups -- Geometric Langlands program: representation-theoretic aspects. msc | Several complex variables and analytic spaces -- Automorphic functions -- Automorphic functions. msc

Classification: LCC QA353.A9 E945 2016 | DDC 512.7--dc23

LC record available at <https://lcn.loc.gov/2019005230>

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

DOI: <https://doi.org/10.1090/conm/732>

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## Preface

This volume of papers grew from the meeting entitled *Building Bridges: 3rd EU/US Summer School + Workshop on Automorphic Forms and Related Topics*, which was held from 11 July 2016 to 22 July 2016 at the University of Sarajevo in Bosnia and Herzegovina. For brevity, we refer to the conference as *BB3*. As the title indicates, *BB3* was one in a series of meetings which are organized biennially: *BB1* was held in Aachen, Germany in 2012, *BB2* was held in Bristol, England in 2014 and more recently, *BB4* was held in Budapest, Hungary in 2018. Tentative plans are in place to hold *BB5* in Sarajevo in 2020.

Each of the *Building Bridges* events has the same organizational theme. The first week is a summer school consisting of three different two day topics which are given at the advanced graduate student or early postdoctoral researcher level. The goal is to provide young mathematicians a means by which they can “build a mathematical bridge” from their current topic of study to other areas of research. The second week is a somewhat standard, while strikingly non-standard, workshop with numerous lectures of various length.

Beyond the mathematical content of each *BB* event, the organizers purposefully devote considerable attention and energy to create an environment of diversity and welcomeness for all participants. There are no invited lectures for the workshop, and everyone who wishes to speak is given an opportunity. Each talk is for at most 40 minutes, and for several days there are sessions of “speed talks”, which are strictly timed to go for no more than two minutes. In fact, a panel of judges is formed to enforce the “rules” of speed talks and award prizes for certain dynamically created categories such as creativity, timing, and entertainment. The speed talks are a lot of fun.

Additionally, *BB3* scheduled a panel discussion on diversity which included Dr. Adriana Espinosa from The Department of Psychology at The City College of New York. The organizers wanted the topic of diversity, in its broadest sense, to have a prominent role in the conversation of the workshop. We were very happy to read that many of the (anonymous) reviews which were submitted after the workshop to praise the diversity panel. We have invited Dr. Espinosa to include in this volume an article which highlights the discussion from the diversity panel, and to provide additional ideas for future consideration.

The concept of *Building Bridges* begins with Lynne Walling, who remains the principal organizer no matter where *BB* is held. Lynne is the source of energy and inspiration for the *Building Bridges* events. The other editors of this volume (S.A., J.J., and L.S.) are following Lynne’s lead, and are extremely grateful to be included in making her ideas and vision come to life.



We wish to thank the following financial sponsors of the *BB3*: European Mathematical Society, The Heilbronn Institute for Mathematical Research, The School of Economics and Business at the University of Sarajevo, the Number Theory Foundation, The National Science Foundation, Foundation Compositio Mathematica, and the American Institute of Mathematics. Their generosity is what made *BB3* happen.

As stated, the workshop solicited anonymous comments from all participants. We did so in order to learn ways in which the next *Building Bridges* could be improved. The broad consensus is that Sarajevo is wonderful. With that said, we wish to express our thanks to the School of Economics and Business at the University of Sarajevo for hosting *BB3*. For many of the participants, this event was their first trip to Sarajevo, and everyone is looking forward to their next visit.

This volume commemorates a great meeting held at a wonderful place, and each of us are happy to have been part of it.

Samuele Anni  
Jay Jorgenson  
Lejla Smajlović  
Lynne Walling  
November 2018

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This volume contains the proceedings of the Building Bridges: 3rd EU/US Summer School and Workshop on Automorphic Forms and Related Topics, which was held in Sarajevo from July 11–22, 2016. The articles summarize material which was presented during the lectures and speed talks during the workshop.

These articles address various aspects of the theory of automorphic forms and its relations with the theory of  $L$ -functions, the theory of elliptic curves, and representation theory.

In addition to mathematical content, the workshop held a panel discussion on diversity and inclusion, which was chaired by a social scientist who has contributed to this volume as well.

This volume is intended for researchers interested in expanding their own areas of focus, thus allowing them to “build bridges” to mathematical questions in other fields.



ISBN 978-1-4704-3525-7



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CONM/732