Automorphic Forms, Geometry & Number Theory

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Contributions to Automorphic Forms, Geometry, and Number Theory Haruzo Hida, Dinakar

Ramakrishnan, Freydoon Shahidi, 2004-03-11 In Contributions to Automorphic Forms Geometry and Number Theory Haruzo Hida Dinakar Ramakrishnan and Freydoon Shahidi bring together a distinguished group of experts to explore automorphic forms principally via the associated L functions representation theory and geometry Because these themes are at the cutting edge of a central area of modern mathematics and are related to the philosophical base of Wiles proof of Fermat's last theorem this book will be of interest to working mathematicians and students alike Never previously published the contributions to this volume expose the reader to a host of difficult and thought provoking problems Each of the extraordinary and noteworthy mathematicians in this volume makes a unique contribution to a field that is currently seeing explosive growth New and powerful results are being proved radically and continually changing the field s make up Contributions to Automorphic Forms Geometry and Number Theory will likely lead to vital interaction among researchers and also help prepare students and other young mathematicians to enter this exciting area of pure mathematics Contributors Jeffrey Adams Jeffrey D Adler James Arthur Don Blasius Siegfried Boecherer Daniel Bump William Casselmann Laurent Clozel James Cogdell Laurence Corwin Solomon Friedberg Masaaki Furusawa Benedict Gross Thomas Hales Joseph Harris Michael Harris Jeffrey Hoffstein Herv Jacquet Dihua Jiang Nicholas Katz Henry Kim Victor Kreiman Stephen Kudla Philip Kutzko V Lakshmibai Robert Langlands Erez Lapid Ilya Piatetski Shapiro Dipendra Prasad Stephen Rallis Dinakar Ramakrishnan Paul Sally Freydoon Shahidi Peter Sarnak Rainer Schulze Pillot Joseph Shalika David Soudry Ramin Takloo Bigash Yuri Tschinkel Emmanuel Ullmo Marie France Vign ras Jean Loup Waldspurger Contributions to automorphic forms, geometry, and number theory Haruzo Hida, 2004 Automorphic Representations, L-Functions and Applications: Progress and Prospects James W. Cogdell, Dihua Jiang, Stephen S. Kudla, David Soudry, Robert J. Stanton, 2011-06-24 This volume is the proceedings of the conference on Automorphic Representations L functions and Applications Progress and Prospects held at the Department of Mathematics of The Ohio State University March 27 30 2003 in honor of the 60th birthday of Steve Rallis The theory of automorphic representations automorphic L functions and their applications to arithmetic continues to be an area of vigorous and fruitful research. The contributed papers in this volume represent many of the most recent developments and directions including Rankin Selberg L functions Bump Ginzburg Jiang Rallis Lapid Rallis the relative trace formula Jacquet Mao Rallis automorphic representations Gan Gurevich Ginzburg Rallis Soudry representation theory of p adic groups Baruch Kudla Rallis M glin Cogdell Piatetski Shapiro Shahidi p adic methods Harris Li Skinner Vigneras and arithmetic applications Chinta Friedberg Hoffstein The survey articles by Bump on the Rankin Selberg method and by Jacquet on the relative trace formula should be particularly useful as an introduction to the key ideas about these important topics This volume should be of interest both to researchers and students in the area of automorphic

representations as well as to mathematicians in other areas interested in having an overview of current developments in this important field
Collected Works of Herve Jacquet Hervé Jacquet, D. Goldfeld, 2011 Herve Jacquet is one of the founders of the modern theory of automorphic representations and their associated L functions This volume represents a selection of his most influential papers not already available in book form The volume contains papers on the L function attached to a pair of representations of the general linear group Thus it completes Jacquet s papers on the subject joint with Shalika and Piatetski Shapiro that can be found in the volume of selected works of Piatetski Shapiro In particular two often quoted papers of Jacquet and Shalika on the classification of automorphic representations and a historically important paper of Gelbart and Jacquet on the functorial transfer from GL 2 to GL 3 are included Another series of papers pertains to the relative trace formula introduced by Jacquet This is a variant of the standard trace formula which is used to study the period integrals of automorphic forms Nearly complete results are obtained for the period of an automorphic form over a unitary group

Representation Theory, Number Theory, and Invariant Theory Jim Cogdell, Ju-Lee Kim, Chen-Bo Zhu, 2017-10-19 This book contains selected papers based on talks given at the Representation Theory Number Theory and Invariant Theory conference held at Yale University from June 1 to June 5 2015 The meeting and this resulting volume are in honor of Professor Roger Howe on the occasion of his 70th birthday whose work and insights have been deeply influential in the development of these fields The speakers who contributed to this work include Roger Howe s doctoral students Roger Howe himself and other world renowned mathematicians Topics covered include automorphic forms invariant theory representation theory of reductive groups over local fields and related subjects Introduction to Modern Number Theory Yu. I. Manin, Alexei A. Panchishkin, 2006-03-30 This edition has been called startlingly up to date and in this corrected second printing you can be sure that it s even more contemporaneous It surveys from a unified point of view both the modern state and the trends of continuing development in various branches of number theory Illuminated by elementary problems the central ideas of modern theories are laid bare Some topics covered include non Abelian generalizations of class field theory recursive computability and Diophantine equations zeta and L functions This substantially revised and expanded new edition contains several new sections such as Wiles proof of Fermat's Last Theorem and relevant techniques coming from a synthesis of various theories Eisenstein Series and Applications Wee Teck Gan, Stephen S. Kudla, Yuri Tschinkel, 2007-12-22 Eisenstein series are an essential ingredient in the spectral theory of automorphic forms and an important tool in the theory of L functions They have also been exploited extensively by number theorists for many arithmetic purposes Bringing together contributions from areas which do not usually interact with each other this volume introduces diverse users of Eisenstein series to a variety of important applications With this juxtaposition of perspectives the reader obtains deeper insights into the arithmetic of Eisenstein series The central theme of the exposition focuses on the common structural properties of Eisenstein series occurring in many related applications **Mathematical Reviews** .2007 American journal of mathematics ,2007

Bulletin (new Series) of the American Mathematical Society, 2008 Geometry and Analysis of Automorphic Forms of Several Variables Yoshinori Hamahata, 2012 This volume contains contributions of principal speakers of the symposium on geometry and analysis of automorphic forms of several variables held in September 2009 at Tokyo Japan in honor of Takayuki Oda's 60th birthday It presents both research and survey articles in the fields that are the main themes of his work The volume may serve as a quide to developing areas as well as a resource for researchers who seek a broader view and for students who are beginning to explore automorphic form Annales Scientifiques de L'École Normale Supérieure École normale supérieure (France),2008 Mathematical Research Letters ,2006 Formes Automorphes (I): Questions about slopes of modular forms Centre Émile Borel, 2005 This volume is the first of a series of two devoted to automorphic forms from a geometric and arithmetic point of view They also deal with certain parts of the Langlands program The themes treated in this volume include p adic modular forms the local Langlands correspondence for GL n the cohomology of Shimura varieties their reduction modulo p and their stratification by Newton polygons The book is suitable for graduate students and research mathematicians interested in number theory algebra and algebraic geometry The Asian Journal of Mathematics ,2004 **Journal of Lie Theory** ,2006 Journal of the Ramanujan Mathematical Society, 2004

Automorphic Forms and Related Geometry: Assessing the Legacy of I.I. Piatetski-Shapiro James W. Cogdell, Freydoon Shahidi, David Soudry, 2014-04-01 This volume contains the proceedings of the conference Automorphic Forms and Related Geometry Assessing the Legacy of I I Piatetski Shapiro held from April 23 27 2012 at Yale University New Haven CT Ilya I Piatetski Shapiro who passed away on 21 February 2009 was a leading figure in the theory of automorphic forms The conference attempted both to summarize and consolidate the progress that was made during Piatetski Shapiro s lifetime by him and a substantial group of his co workers and to promote future work by identifying fruitful directions of further investigation It was organized around several themes that reflected Piatetski Shapiro s main foci of work and that have promise for future development functoriality and converse theorems local and global functions and their periods adic functions and arithmetic geometry complex geometry and analytic number theory. In each area there were talks to review the current state of affairs with special attention to Piatetski Shapiro's contributions and other talks to report on current work and to outline promising avenues for continued progress The contents of this volume reflect most of the talks that were presented at the conference as well as a few additional contributions. They all represent various aspects of the legacy of Piatetski Shapiro Cas Du Groupe GSp4(4) Jacques Tilouine, 2005 Ce volume fait suite au volume 298 consacr aux Formes Automorphes Il traite un sujet plus restreint que le pr c dent puisqu il est exclusivement consacr aux repr sentations automorphes pour le groupe GSp 4 la plupart du temps sur le corps des rationnels Il traite de questions g om triques cohomologie des vari t s de Siegel arithm tiques construction et tude des repr sentations galoisiennes associ es aux formes cuspidales cohomologiques et d analyse harmonique lemme fondamental tordu avec poids Toutes ces questions avaient t

voqu es plus ou moins directement lors du Semestre Automorphe de Paris en 2000 mais il s agit en g n ral de d veloppements ult rieurs au Semestre lui m me A Torsion Jacquet-Langlands Correspondence Frank Calegari, Akshay Venkatesh, 2019 We prove a numerical form of a Jacquet Langlands correspondence for torsion classes on arithmetic hyperbolic 3 manifolds Prov de l'editor

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