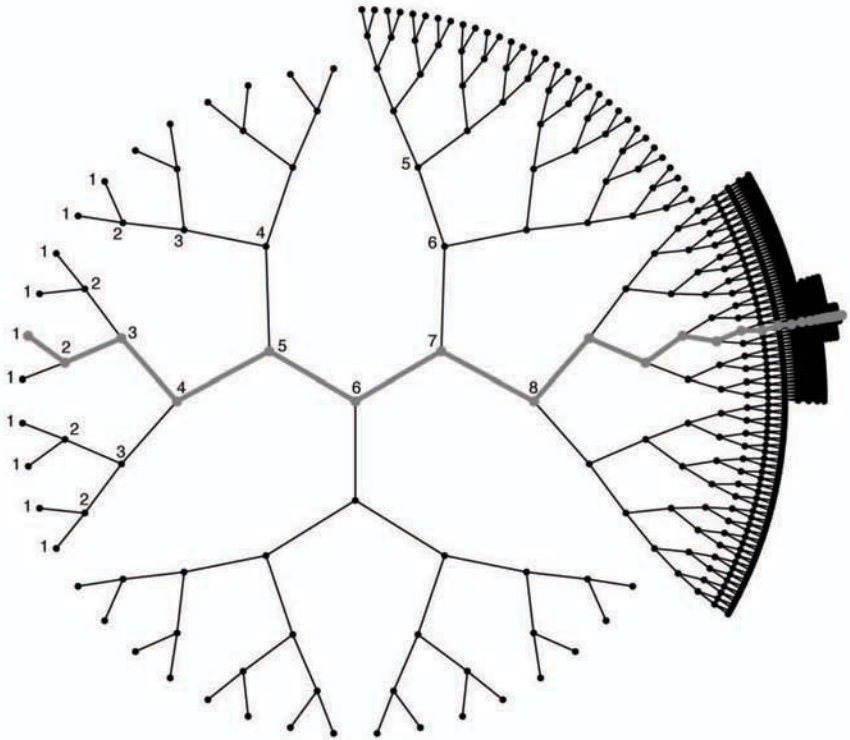


Annals of Mathematics Studies  
Number 161



*A vertical cycle  $Z(j)$  in the case  $p = 2$*

The vertical cycle  $Z(j)$  in the case  $p = 2$  for the endomorphism  $j$  given by (6A.5.2) in Chapter 6: Appendix. Here the half apartment  $\{[\Lambda] = [\Lambda_r] = [[e_1, 2^r e_2]] \mid \text{mult}_{[\Lambda]}(j) > 0\}$  has been marked, and the multiplicities of components have been indicated.

---

# Modular Forms and Special Cycles on Shimura Curves

---

Stephen S. Kudla  
Michael Rapoport  
Tonghai Yang

PRINCETON UNIVERSITY PRESS

PRINCETON AND OXFORD

2006

Copyright © 2006 by Princeton University Press

Published by Princeton University Press, 41 William Street, Princeton, New Jersey 08540

In the United Kingdom: Princeton University Press, 3 Market Place, Woodstock, Oxfordshire OX20 1SY

All Rights Reserved

Library of Congress Cataloging-in-Publication Data

Kudla, Stephen S., 1950–

Modular forms and special cycles on Shimura curves / Stephen S. Kudla, Michael Rapoport, Tonghai Yang.

p. cm. — (Annals of mathematics studies ; 161)

Includes bibliographical references and index.

ISBN-13: 978-0-691-12550-3 (acid-free paper)

ISBN-10: 0-691-12550-3 (acid-free paper)

ISBN-13: 978-0-691-12551-0 (pbk. : acid-free paper)

ISBN-10: 0-691-12551-1 (pbk. : acid-free paper)

1. Arithmetic algebraic geometry. 2. Shimura varieties. I. Rapoport, M., 1948- II. Yang, Tonghai, 1963- III. Title. IV. Annals of mathematics studies ; no. 161.

QA242.5.K83 2006

516.3'5—dc22

2005054621

British Library Cataloging-in-Publication Data is available

This book has been composed in Times Roman in  $\text{\LaTeX}$

The publisher would like to acknowledge the authors of this volume for providing the camera-ready copy from which this book was printed.

Printed on acid-free paper.  $\infty$

pup.princeton.edu

Printed in the United States of America

10 9 8 7 6 5 4 3 2 1