

Contents

Preface	ix
HENRI DARMON AND SHOU-WU ZHANG	
Heegner Points: The Beginnings	1
BRYAN BIRCH	
Correspondence	11
BRYAN BIRCH AND BENEDICT GROSS	
The Gauss Class Number Problem for Imaginary Quadratic Fields	25
DORIAN GOLDFELD	
Heegner Points and Representation Theory	37
BENEDICT GROSS	
Gross–Zagier Revisited	67
BRIAN CONRAD (with an appendix by W. R. MANN)	
Special Value Formulae for Rankin L -Functions	165
VINAYAK VATSAL	
Gross-Zagier Formula for $GL(2)$, II	191
SHOU-WU ZHANG	
Special Cycles and Derivatives of Eisenstein Series	243
STEPHEN KUDLA	
Faltings' Height and the Derivatives of Eisenstein Series	271
TONGHAI YANG	
Elliptic Curves and Analogies Between Number Fields and Function Fields	285
DOUG ULMER	
Heegner Points and Elliptic Curves of Large Rank over Function Fields	317
HENRI DARMON	
Periods and Points Attached to Quadratic Algebras	323
MASSIMO BERTOLINI, HENRI DARMON AND PETER GREEN	