The Seventh International Research Institute of the Mathematical Society of Japan
– Class Field Theory – its Centenary and Prospect

DATE: ARRIVAL DAY **Tuesday, June 2, 1998**

TALKS BEGIN **Wednesday, June 3, 1998**

TALKS END **Friday, June 12, 1998**

(There will be no talks in the afternoon of Saturday, June 6, and on Sunday, June 7.)

PLACE: Building 55, School of Science and Engineering, Waseda University Okubo, Shinjuku, Tokyo 169, Japan

PROGRAM:

June 3

10:10   Opening Address

10:20 - 10:50   **Shokichi Iyanaga** (Japan Acad.)
Memories of Professor Teiji TAKAGI

11:00 - 12:00   **Günther Frei** (Univ. Laval)
How H. Hasse was led to the Local-Global Principle, the Reciprocity Laws and Local Class Field Theory.

13:30 - 14:20   **Noriyuki Otsubo** (Univ. Tokyo)
Recent Progress on the Finiteness of Torsion Algebraic Cycles

14:30 - 15:20   **Kanetomo Sato** (Tokyo Inst. Tech.)
Finiteness of a certain Motivic Cohomology of Varieties over Local and Global Fields

15:50 - 16:40   **Moulay Chrif Ismaili** (Univ. Oujda)
The Capitulation Problem for Certain Number Fields

16:50 - 17:50   **Hiroshi Suzuki** (Nagoya Univ.)
On the Capitulation Problem

June 4

11:15 - 12:15   **Peter Stevenhagen** (Univ. Amsterdam)
Generating Class Fields using Shimura Reciprocity

13:45 - 14:45   **Takeshi Saito** (Univ. Tokyo)
Modular Forms and p-adic Hodge Theory

15:40 - 16:40   **Spencer Bloch** (Univ. Chicago)
Higher Theta Functions

16:50 - 17:50   **Kazuya Kato** (Univ. Tokyo)
Log Hodge Structures and Classifying Spaces

June 5

10:00 - 11:00 **Shuji Saito** (Tokyo Inst. Tech.)
Generalization of the Theorem of Brauer-Hasse-Noether
11:15 - 12:15 **Ivan Fesenko** (Univ. Nottingham)
Neukirch Construction of the Reciprocity Map
13:45 - 14:45 **Masakazu Yamagishi** (Nagoya Inst. Tech.)
A Survey of p-Extensions
15:15 - 16:15 **Helmut Koch** (Humboldt-Univ., Berlin)
History of the Theorem of Shafarevich in the Theory of
Class Formations
16:30 - 17:30 **Thong Nguyen Quang Do** (Univ. Franche-Comté)
Galois Module Structure of Class-Formations and free
pro-p-Extensions
18:30 - 20:30 RECEPTION at Avaco

June 6

10:00 - 11:00 **Peter Roquette** (Univ. Heidelberg)
Class Field Theory in Characteristic p: its Origin and
History
11:15 - 12:15 **Tsuneo Tamagawa** (Yale Univ.)
Class field theory is easy: Hazewinkel-Iwasawa Theory
of Class Fields of Function Fields over Finite Fields

June 8

10:00 - 10:50 **Winfried Kohnen** (Univ. Heidelberg)
Class Numbers of Imaginary Quadratic Fields
11:00 - 11:50 **Ryotaro Okazaki** (Doshisha Univ.)
On Parities of Relative Class Numbers of Certain
CM-Extensions
13:20 - 14:10 **Akito Nomura** (Kanazawa Univ.)
On Embedding Problems with restricted Ramifications
14:20 - 15:10 **Sang Geun Hahn** (KAIST)
Some Congruences for Binomial Coefficients
15:40 - 16:40 **Florian Pop** (Univ. Bonn)
On the Absolute Galois Group of the Rationals

June 9

10:00 - 11:00   **Ralph Greenberg** (Univ. Washington)
Iwasawa Theory – Past and Present

11:10 - 12:00   **Manabu Ozaki** (Waseda Univ.)
Iwasawa Invariants of $\mathbf{Z}_p$-Extensions over an imaginary Quadratic Field

13:30 - 14:20   **Masato Kurihara** (Tokyo Metropolitan Univ.)
Iwasawa Theory and Ideal Class Groups of large Number Fields

14:30 - 15:20   **Hiroaki Nakamura** (Tokyo Metropolitan Univ.)
Artin Braid Groups and Families of Elliptic Curves

15:50 - 16:40   **Hisao Taya** (Tohoku Univ.)
On p-adic Zeta Functions and Class Groups of $\mathbf{Z}_p$-Extensions of certain totally real Fields

16:50 - 17:50   **John H. Coates** (Univ. Cambridge)
Iwasawa Theory of Elliptic Curves without Complex Multiplication I

June 10

10:00 - 11:00   **Norbert Schappacher** (Univ. Strasbourg)
On the History of Hilbert's 12th Problem, 1900–1932

11:15 - 12:15   **William Casselman** (Univ. British Columbia)
Early Years of the L-group

13:45 - 14:45   **Norbert Schappacher** (Univ. Strasbourg)
Complex Multiplication in Arithmetic Algebraic Geometry: Hecke Characters, Abelian Varieties, and Motives

15:15 - 16:15   **Roland Gillard** (Institut Fourier)
Obstructions in Deformation Problems

16:30 - 17:30   **Thomas Zink** (Univ. Bielefeld)
P-adic Periods and Displays

June 11

10:00 - 11:00   **René Schoof** (Univ. Roma II)
Abelian Varieties over Number Fields with good Reduction everywhere

11:15 - 12:15   **Hiromichi Yanai** (Aichi Inst. Tech.)
Exceptional Hodge Cycles and unramified Class Fields

13:45 - 14:45   **David R. Kohel** (Univ. Singapore)
Hecke Module Structure of Quaternions

15:15 - 16:15   **Ram Murty** (Queen's Univ. at Kingston)
What is known about Artin L-Functions ?

16:30 - 17:30   **Ichiro Satake** (Univ. Chuo)
Classification Theory of Semisimple Algebraic Groups

June 12

10:00 - 11:00   **John H. Coates** (Univ. Cambridge)
Iwasawa Theory of Elliptic Curves without Complex
Multiplication II

11:15 - 12:15   **Jean Cougnard** (Univ. Caen)
On Rings of Integers which are stably free and non free
$H_8 \times C_2$ Modules

13:45 - 14:45   **M. Morishita** (Kanazawa Univ.) and
T. Watanabe (Osaka Univ.)
Adele Geometry of Numbers

15:05 - 16:05   **Takashi Ono** (Johns Hopkins Univ.)
On Shafarevich-Tate Sets

16:15 - 17:15   **Yoshihiko Yamamoto** (Osaka Univ.)
The Canonical Power Series associated with Elliptic
Curves over **Q**

17:30 - 18:30   Farewell Party