# International Workshop on Potential Theory 2004, Matsue

Venue: Shimane University, Matsue, Japan

Period: August 23-28, 2004

# Monday, August 23

18:00-20:00 IWPT Reception

# Tuesday, August 24

9:25-9:30 IWPT opening

**Plenary lectures** 

9:30-10:30 Stephen J. Gardiner

Radial limits of harmonic functions

11:00-12:00 Jun Kigami

Resistance forms and heat kernel estimates on fractals

12:00-12:10 Photo

13:30-14:30 Nageswari Shanmugalingam

Dirichlet forms and Newton-Sobolev spaces for metric spaces

supporting Poincare inequalities

Lectures in parallel sessions

15:00-15:30 Olli Martio

Poisson modifications for quasisuperminimizers

Jürgen Bliedtner

Convergence properties of semi-elliptic differential operators

Manfred Stoll

On generalizations of the Littlewood-Paley inequalities to do-

mains in  $\mathbb{R}^n (n \geq 2)$ 

15:45-16:15 Jana Björn

Boundary regularity for p-harmonic functions on metric spaces

## Klaus Janssen

Integral representation for space-time excessive functions

## Hong Rae Cho

Capacitary inequalities for mean Lipschitz spaces on the unit ball in  $\mathbb{C}^n$ 

## 16:30-17:00 Takayori Ono

Hölder continuity of solutions to quasilinear elliptic equations with measure data

### Torbjörn Lundh

Minimally thin sets below a function graph

### E. G. Kwon

M-subharmonic Hardy functions on the complex ball

#### 17:15-17:45 Shin-ichi Ohta

Cheeger-type Sobolev spaces for metric space targets

#### Kentaro Hirata

An estimate for the product of the Green function and the Martin kernel  $\,$ 

#### Yûsuke Okuvama

Poincaré functions and the value distributions in complex dynamics

## Wednesday, August 25

## Plenary lectures

# 9:30-10:30 Krzysztof Burdzy

Neumann eigenfunctions and Brownian couplings

## 11:00-12:00 Pekka Koskela

One-dimensional measure of a preimage

## 13:30-14:30 Jang-Mei Wu

Quasiconformal deformation of self-similar sets and applications

## Lectures in parallel sessions

### 15:00-15:30 Minoru Murata

Representations of nonnegative solutions for parabolic equations

#### Rikio Yoneda

The essential norm of the integration operators and Multipliers on Bergman spaces

## Takahide Kurokawa

On a decomposition of the Schwartz class

## 15:45-16:15 Yehuda Pinchover

Large time behavior of the heat kernel

## Katsuya Ishizaki

Borel and Julia directions of meromorphic Schröder functions

### Yoichi Miyazaki

The  $L^p$  resolvents for elliptic systems of divergence form

### 16:30-17:00 Fausto Di Biase

On tangential approach regions for bounded harmonic functions in the unit disc

### Akane Iwamura

Estimates of the  $\alpha$ -Riesz potentials in metric spaces

## Minoru Yanagishita

On the behavior at infinity for non-negative superharmonic functions in a cone

#### 17:15-17:45 Kohur

Kohur GowriSankaran and David Singman

Boundary behaviour on trees

### Hisako Watanabe

Estimates of maximal functions by Hausdorff contents in a metric space  $\,$ 

## I. Miyamoto and H. Yoshida

A covering theorem and a quantitative property of minimally thin sets in a cone

# Thursday, August 26

## Plenary lectures

### 9:30-10:30 Masatoshi Fukushima

Trace Dirichlet forms and related topics

### 11:00-12:00 Stephanie Nivoche

A Hilbert lemniscate theorem in  $\mathbb{C}^n$ 

# Friday, August 27

# Plenary lectures

9:30-10:30 Yves Guivarc'h

Martin boundaries of skew products, and orbit closures of linear  $\,$ 

group actions

11:00-12:00 Joaquim Ortega and Kristian Seip

Harmonic measure in Swiss cheeses

13:30-14:30 Tom Carroll

Harmonic measure in parabola-shaped regions in  $\mathbb{R}^n$ 

Lectures in parallel sessions

15:00-15:30 Krzysztof Bogdan (joint work with Paweł Sztonyk)

Harnack's inequality for stable Lévy processes

Tero Kilpeläinen

p-Laplacian problems near the boundary

Hiroaki Masaoka

Quasiconformal mapping and the minimal Martin boundary of covering surfaces of the punctured Riemann sphere  $\hat{\mathbb{C}}\setminus\{0\}$  of

Heins type

15:45-16:15 Renming Song

Potential theory of special subordinators and subordinate killed

Brownian motions

Hyungwoon Koo

Holomorphic mean Lipschitz spaces

Tetsu Shimomura

Sobolev embeddings for variable exponent Riesz potentials

16:30-17:00 Katsunori Shimomura

The caloric morphism for radial metrics on semi-euclidean spaces.

**Boo Rim Choe** 

Non-orthogonal projections for harmonic Bergman spaces

Yoshihiro Mizuta

Continuity properties for weakly monotone Sobolev functions

17:15-17:45 Masaharu Nishio, Katsunori Shimomura and Noriaki

Suzuki

 $L^p\text{-}\text{boundedness}$  of Bergman projections for  $\alpha\text{-}\text{parabolic}$  operators

Premalatha and A. K. Kalyani Some potential theoretic results on an infinite network

# Saturday, August 28

# Plenary lectures

9:30-10:30 Zbigniew Błocki

The Bergman kernel and pluripotential theory

11:00-12:00 Wolfhard Hansen

Global comparison of perturbed Green functions  ${\cal G}$