



**Welcome to  
First International Workshop  
on Automatic Performance  
Tuning (iWAPT2006)**

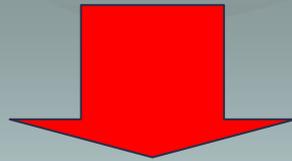
Co-Chair

Takahiro Katagiri

The University of  
Electro-Communications

# Objective of the Workshop

- ◆ Computer environments are getting complex.
  - ❖ GRID
    - ◆ Heterogeneous Computation Environment
  - ❖ Embedded System
    - ◆ Software Specification
- ◆ To solve their complexities, automatic performance tuning is much-wanted technology.



1. **To show the advanced auto-tuning technologies,**
2. **To find its possibilities.**

# Invited Speakers

- ◆ **Dr. Richard Vuduc**

*Lawrence Livermore National Laboratory,  
USA*

- ❖ "OSKI: A Library of Automatically Tuned Sparse Matrix Kernels"

- ◆ **Dr. Victor Eijkhout**

*Texas Advanced Computing Center,  
The University of Texas at Austin, USA*

- ❖ "A Self-adapting System for Linear Solver Selection"

# Sessions

## ◆ Session 1: State-of-the-Art of Auto-tuning Research

❖ Prof. Toshiyuki Imamura

*The University of Electro-Communications*

◆ "Automatic Tuning for Collective Communication Operations"

❖ Dr. Ken Naono

*Central Research Laboratory, Hitachi Ltd.*

◆ "Numerical Policy Interface for Automatic Tuning Library"

## ◆ Session 2: Advanced Research on Auto-tuning

❖ Prof. Takeshi Iwashita

*Academic Center for Computing and Media Studies, Kyoto University*

◆ "Easy Comparison Way of Orderings for Parallel ILU Preconditioned Iterative Solver"

❖ Prof. Shoji Itoh

*Academic Computing and Communications Center, University of Tsukuba*

◆ "Development of Performance Evaluation System and Knowledge Database on Matrix Computations"

# Reception

◆ 17:30-19:30

Restaurant “Matumoto-ro”,  
In the front of Koshiba Hall

❖ Please ask about “on-the-fly” registration  
in the front desk.

# Sponsors

## ◆ Sponsorship

### ❖ **Grant-in-Aid for Scientific Research on Priority Areas (Cyber Infrastructure for the Information Explosion Era)**

- ◆ "Research on Mathematical Core for Robust Auto-Tuning Software in Information Explosion Era"

### ❖ **Grant-in-Aid for Scientific Research (C)**

- ◆ "Auto-tuning Method for Numerical Computations and Embedded Systems"

## ◆ Support:

### ❖ **Japan Society for Industrial and Applied Mathematics (JSIAM)**

- ◆ Activity Group, "Algorithms for Matrix/Eigenvalue Problems and their Applications"

# Committee and staff

## ◆ Co-Chairs:

- ❖ Takahiro Katagiri, The University of Electro-Communications
- ❖ Reiji Suda, The University of Tokyo

## ◆ Organizing Committees:

- ❖ Toshiyuki Imamura, The University of Electro-Communications
- ❖ Ken Naono, HITACHI Limited
- ❖ Kentaro Shimizu, The University of Tokyo
- ❖ Yusaku Yamamoto, Nagoya University
- ❖ Toshitugu Yuba, The University of Electro-Communications

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- ❖ Kaori Sato, The University of Tokyo
- ❖ Kazumasa Kotani, The University of Tokyo
- ❖ Tomohisa Yamakami, The University of Tokyo
- ❖ Tomohiro Tsukamoto, The University of Electro-Communications
- ❖ Yu Nakanishi, The University of Electro-Communications

*Let's Enjoy!*

