

# ● Propagation of Ultra-large-scale Computation by the Domain-decomposition-method for Industrial Problems

📅 開催時期 2012-10-12 13:45~2012-10-13 12:15

📍 場所 Nishijin Plaza, Kyushu University

《平成24年度九州大学マス・フォア・インダストリ研究所共同利用研究集会》

【平成24年度数学・数理科学と諸科学・産業との連携研究ワークショップ】

## PUCDIP 2012

### Propagation of Ultra-large-scale Computation by the Domain-decomposition-method for Industrial Problems

※ この研究集会は文部科学省と共同で開催されます。

Date October 12-13, 2012

Venue 2-16-23 Nishijin, Sawara-ku, Fukuoka City 814-0002, JAPAN  
[Nishijin Plaza, Kyushu University](#)

Program Friday, October 12

13:45 -- 13:55

Opening Ceremony

Chair : Hiroshi Kanayama

14:00 -- 15:30

Masahisa Tabata (Waseda University)

**"Some Remarks on Domain Decomposition Methods"**

Frederic Magoules (Ecole Centrale Paris)

**"Optimized Schwarz Domain Decomposition Methods"**

Chair : Masahisa Tabata

15:45 -- 17:15

Daisuke Tagami (Kyushu University)

**"An Iterative Domain Decomposition Method with Mixed Formulations"**

Hiroshi Kanayama (Kyushu University)

**"Large Scale Magnetic Field Analysis for Induction Motors"**

Saturday, October 13

Chair : Ryuji Shioya

9:00 -- 10:30

Mitsuteru Asai (Kyushu University)

**"Large Scale Tsunami Run-up Simulation by a Hybrid-parallel SPH"**

Akio Miyoshi (Insight, Inc)  
**"Promotion of Open-Source ADVENTURE by Insight"**

Chair : Daisuke Tagami  
10:45 -- 12:15

Ryuji Shioya (Toyo University)

**"Development of a Numerical Library based on Hierarchical Domain  
Decomposition for Post Petascale Simulation"**

Hiroshi Kawai (Tokyo University of Science, Suwa)

**"Performance Evaluation of ADVENTURE on K Computer"**

Masao Ogino (Nagoya University)

**"A Hybrid CPU-GPU Implementation of Finite Element Methods  
based on the Domain Decomposition Method"**

A. M. M. Mukaddes (Toyo University)

**"ADVENTURE\_Thermal- an Open Source Module for Heat  
Conduction Problems"**

Organizer Hiroshi Kanayama (Kyushu University)