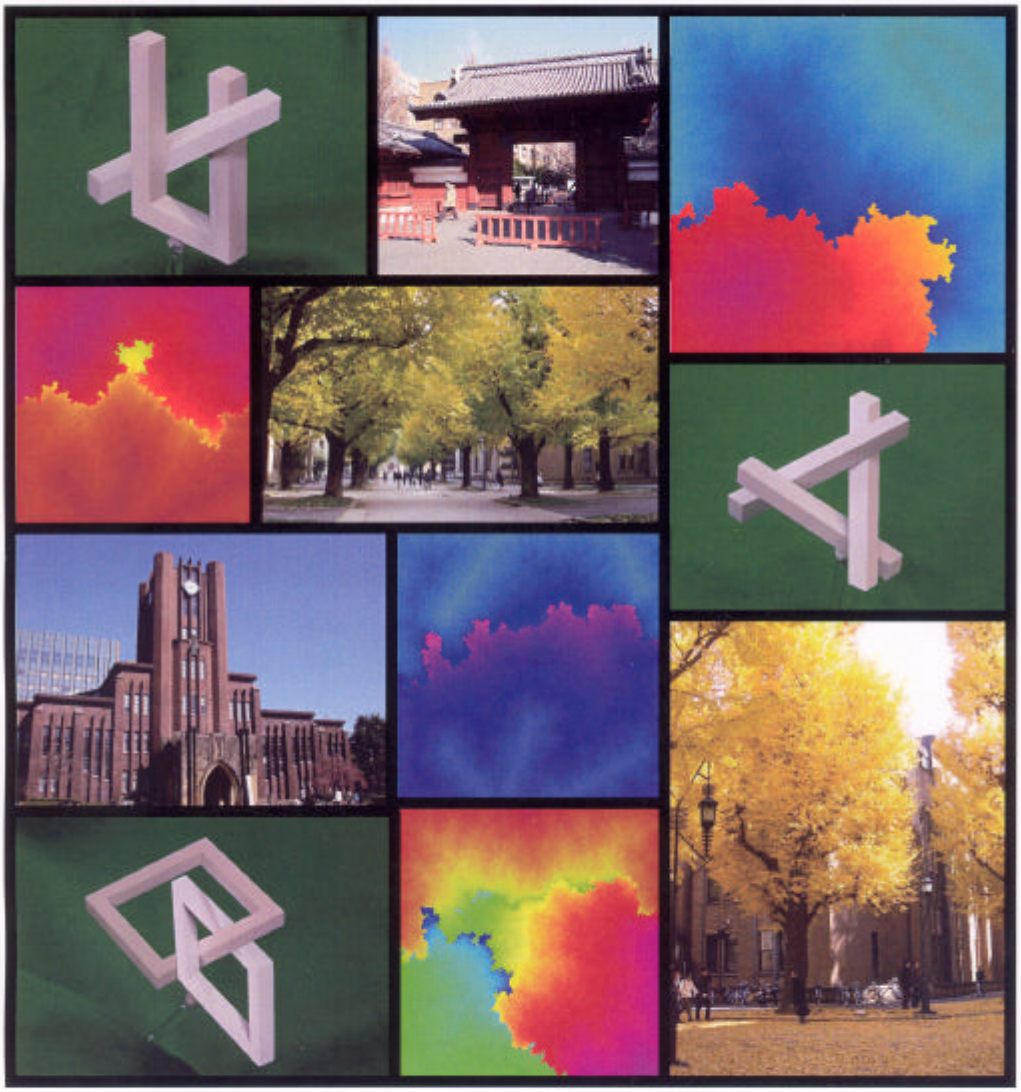
EURO Special Interest Group
on Cutting and Packing



4th ESICUP Meeting

21st Century COE Program on Information Science and
Technology Strategic Core of the University of Tokyo, Japan
March 25-27, 2007

Scientific Program Schedule

Monday

9h45 – 9h55

Opening Session *(Seminar Room A,D)*
Chairperson: Kokichi Sugihara

– Welcome

9h55 – 10h45

Session 1 *(Seminar Room A,D)*
Chairperson: Gerhard Wäscher

1.1 – An Improved Typology for Cutting and Packing Problems – Part II
Gerhard Wäscher

1.2 – Path Generation for an Electric Discharge Wire Cutter
Shinji Imahori, Motoki Kushiya, Takeru Nakashima, Kokichi Sugihara

11h15 – 12h30

Session 2 *(Seminar Room A,D)*
Chairperson: Mutsunori Yagiura

2.1 – Theoretical and experimental comparisons of heuristic algorithms for rectangle packing problems
Shinji Imahori, Mutsunori Yagiura

2.2 – A branch and bound algorithm for the Strip Packing Problem
F. Parreño, R. Alvarez-Valdes, J.M. Tamarit

2.3 – A Comparative Study of Evolutionary-Computation-Based Models for Generating Hyper-heuristics when Solving 2D-Regular Cutting Stock Problems
Hugo Terashima-Marín

14h00 – 15h40

Session 3a *(Seminar Room A,D)*
Chairperson: Graham Kendall

3a.1 – Tools of mathematical modeling of 2D arbitrary object packing problems
Julia A. Bennell, Yu. Stoyan, T. Romanova

3a.2 – The No Fit Polygon: Beyond Cutting and Packing
Edmund Burke, Robert Hellier, Graham Kendall, Glenn Whitwell

3a.3 – The Irregular Non-Fit Polygon using Minkowski Sums with Binary and Local Search

L. Illanes-Díaz Rivera, H. Terashima-Marín, P. Ross

Session 3b (*Lecture Room 61*)
Chairperson: Ramon Alvarez-Valdes

3b.1 – A maximal-space GRASP algorithm for the container loading problem

F. Parreño, R. Alvarez-Valdes, J.F. Oliveira, J.M. Tamarit

3b.2 – Heuristics for the Three-dimensional Knapsack Packing Problem

J. Egeblad, D. Pisinger

3b.3 – Solving Packing Problems with Cross-Entropy Method

Yiping Lu, Jianzhong Cha

3b.4 – Container Loading with multi-drop constraints

Søren Gram Christensen, David Magid Rousøe

16h10 – 17h25

Session 4a (*Seminar Room A,D*)
Chairperson: A. Miguel Gomes

4a.1 – Clusters Lattice Packing: a new approach to the Irregular Packing Problem

M. Teresa Costa, A. Miguel Gomes, José F. Oliveira

4a.2 – Modification of sequential-single allocation method for allocation of circles

A. Kartashov, R.A. Pudlo

4a.3 – Strip packing problem for circles and rectangles

Anton Rudnev, Yuri Kochetov, Josef Kallrath

Session 4b (*Lecture Room 61*)
Chairperson: José Valério de Carvalho

4b.1 – A comparative analysis and computational study of dual-feasible functions for bin-packing problems

François Clautiaux, Cláudio Alves, José Valério de Carvalho

4b.2 – An algorithm for the min-cost bin rebalancing problem

Alex Fukunaga

4b.3 – Pattern generation with pattern cardinality constraints and solution cardinality objective function

Fábián Csaba Béla, Illyés László

Tuesday

9h30 – 10h45

Session 5 *(Seminar Room A,D)*
Chairperson: Julia Bennell

5.1 – A metaheuristic approach based on overlap minimization for the irregular packing problem

Shunji Umetani, Mutsunori Yagiura, Takashi Imamichi, Shinji Imahori, Koji Nonobe, Toshihide Ibaraki

5.2 – Two-dimensional Irregular shape bin packing

Julia A. Bennell, Xiang Song

5.3 – An Approach for the Parallel Processing of Irregular 2D Layout Problems

Edmund Burke, Robert Hellier, Graham Kendall, Glenn Whitwell

11h15 – 12h30

Session 6 *(Seminar Room A,D)*
Chairperson: Toshihide Ibaraki

6.1 – Translational packing of non-convex polyhedra in three dimensions

J. Egeblad, B. K. Nielsen, M. Brazil

6.2 – A Hybrid Heuristic for the Constrained Two-dimensional Non-guillotine Orthogonal Cutting Problem

José Fernando Gonçalves

6.3 – Weighted Module Placement Based on Rectangle Packing

Yusuke Kurebe, Hiroyoshi Miwa, Toshihide Ibaraki

12h30 – 12h40

Closing Session *(Seminar Room A,D)*
Chairperson: José F. Oliveira

– ESICUP Business