Optimal Synergy of Engineering and Life Sciences

Announcement-V: June 15, 2006

Papers after peer review will be published in a special volume:
“Optimal Synergy of Engineering and Life Sciences”
by Journal of Evolutionary Optimization (http://www.jeo.org/avignon)

Conference venue: Palais des Papes, Avignon, France
contact: Julie MELIN, j.melin@palais-des-papes.com
Chargée de clientèle:
tél: 04 90 27 50 59 fax: 04 90 27 50 58 Centre de Congrès du Palais des Papes
Dates: June 26, 27, 29 and 30, 2006
Sunday, June 25, no session; a tour of the Palais from 4PM to 6 PM
Wednesday, June 28, no session; regional sight seeing to be announced

Dead lines
1. Full paper (after the conference) by September 15, 2006
2. Reviewers comments back to authors by November 15, 2006
4. Publication of the Special Issue June 2007

Schedule

Day-I: Monday, June 26, 2006
(a) Opening Session — Chair: José Braga
   i. 9:00 – 9:15 “CNRS-NSF Cooperation” Conference Chair’s Comments — Braga
   ii. 9:15 – 9:30 Introduction of the Symposium — Selvadurai
(b) Coffee break: 9:30 – 10:00
(c) Theoretical & Applied Mechanics — Chair: Patrick Selvadurai
   i. 10:00 – 11:30 — “Elasticity and invariance” Spencer — anthony_j.m.s@which.net
   ii. 11:30 – 13:00 — “On the Equations of Balance for Bodies with a Growing Mass”
      Irschik — irschik@mechatronik.uni-linz.ac.at
(d) 1300 – 1500 — Lunch break
(e) Computational Mechanics — Chair: Hans Irschik
   i. 15:00 – 16:30 — “Bifurcation, Buckled Plates, and Nonlinear PDE’s ”
      Wolkowisky — wolkowis@euclid.colorado.edu
   ii. 16:30 – 18:00 — Thackeray — “Quantification of environmental change, isotopic
      analyses, and southern African mammals: a palaeoanthropological perspective with
      special reference to Mrs Ples.”
(f) 17:00 – 19:00 — Free Time
(g) 19:00 – 20:00 — General Lecture-I: Chair Anthony J.M. Spencer —
   “Mathematics and Meditation: Two Paradigms for Dealing with the World”
   by Bruno Buchberger — Bruno.Buchberger@risc.uni-linz.ac.at

Day-II: Tuesday, June 27, 2006
(a) Engineering Mechanics and Applications — Chair: Gautam Dasgupta
   i. 10:00 – 11:30 — Partrick Selvadurai — “Betti’s reciprocal theorem for inclusion and
      contact problems ” — patrick.selvadurai@mcgill.ca
   ii. 11:30 – 13:00 — Jose Manuel Garcia Aznar —
      “Computational simulation of bone remodelling” — jmgaraz@unizar.es
(b) 1300 – 1500 — Lunch break
Day-III: Thursday, June 29, 2006
(a) Lifescience Applications — Chair: Renée Garcia
   i. 1000 – 1130
   ii. 1130 – 1300 — Braga — “How can we handle patterns of interconnections between developing teeth?”
(b) 1300 – 1500 — Lunch break
(c) Theoretical Mathematics — Chair: Jay H. Wolkowisky
   i. 15:00 – 16:30 — Buchberger — “Formal Mathematics: A Key to the Future”
      http://www.jeo.org/avignon
   ii. 16:30 – 18:00 — Keränen — Combinatorics on Words
   (d) 1800 – 1900 — Free Time
(e) 1900 – 2000 — General Lecture-IV: Chair: Braga — Paleanthropology: “Animals and Art” by Thackeray — thack@nfi.co.za

Day-IV: Friday, June 30, 2006
(a) Theory and Applications in Imaging — Chair — Eizaburo Tachibana
   i. 10:00 – 11:00 Braga — Dental Growth Increments (theory and instrumentation)
   ii. 11:00 – 12:00 Gavrilovic — predrag@pluto.iziis.ukim.edu.mk
      “Earthquake protections of Byzantine churches in Macedonia”
   iii. 12:00 – 13:00 Gout — Imaging
(b) 1300 – 1500 — Lunch break
(c) Research in Progress — Chair: José Braga
   i. 15:00 – 16:00 Renée Garcia
      “Success and Failure in the Use of CT imaging in Cranial Bone Density Research”
      rgarcia43@saddleback.edu
   ii. 16:00 – 17:00 Deano Stynder — dstynder@yahoo.com
      “Human craniofacial variability and studies of population continuity and discontinuity, a cautionary tale”
   iii. 17:00 – 18:00 Gautam Dasgupta — dasgupta@columbia.edu
      “Material modeling and morphometrics using algebraic geometry”
(d) 18:00 – 19:00 — Closing Session — Chair: José Braga
   i. 18:00 to 18:30 — Remarks from participants
   ii. 18:30 to 18:45 — Gautam Dasgupta — Activities supported by the NSF
      A. Announcement of the October 12 and 13, 2006 meetings in Columbia University
      Focus: Mathematics of Optimization and Implementation in Life Sciences
   iii. 18:45 to 19:00 — Proposals for Future Activities to continuing cooperative projects
(e) 19:00 – 20:00 — General Lecture-III: Chair: Dasgupta — Archeology:
   “Structural conservation, repair and strengthening of historical monuments”
   by Gavrilovic Predrag — predrag@pluto.iziis.ukim.edu.mk
(f) 2000 – 2200 — Dinner