

國立中山大學

NATIONAL SUN YAT-SEN UNIVERSITY

**Joint International Workshop
on
Trefftz Method VI
and
Method of Fundamental Solutions II**

**Department of Applied Mathematics
National Sun Yat-sen University
Kaohsiung, Taiwan**

March 15-18, 2011



Trefftz/MFS 2011

Joint International Workshop on Trefftz Method VI and Method of Fundamental Solutions II

National Sun Yat-sen University, Kaohsiung, Taiwan.

March 15-18 (Tuesday-Friday), 2011. (4 days including one or half day excursion)

Conference Goal

To foster collaboration among applied mathematicians and engineering researchers on utilizing boundary methods for numerical solution of PDE.

Conference Scope

Trefftz method, method of fundamental solutions, and method of particular solutions belong to a class of numerical methods that utilize special solutions of partial differential equation, such as general solutions, fundamental solutions, and particular solutions, as basis functions. The purpose is to reduce the discretization dimension of the numerical solution system from that of the domain to that of the boundary. These, and other similar methods, can be called the boundary collocation methods. These methods are generally “meshless”, that is, without the element for integration, which is required by methods such as the finite element method. Although these boundary methods have a long history of development, there seems to be a recent resurgence in their popularity. By this Joint Workshop, we hope to bring together the communities of applied mathematicians and engineering researchers to share information and to seek collaboration in the development and application of these methods.

Conference Themes

Trefftz method, method of fundamental solutions, method of particular solutions, boundary collocation methods, combined and hybrid methods, boundary element method, boundary integral equation method, Green’s function, boundary node method, radial basis function method, meshless methods, and other related methods.

Conference Chairs

Trefftz: Zi-Cai Li (李子才), Tzon-Tzer Lu (呂宗澤), Alexander Cheng (程宏達)

MSF: Frank Young (楊德良), Jeng-Tzong Chen (陳正宗), C.S. Chen (陳清祥)

Plenary Speakers

Andrzej Zieliński (Cracow University of Technology, Poland)

Ismael Herrera (National University of Mexico, Mexico)

Robert Schaback (Universität Göttingen, Germany)

Andreas Karageorghis (University of Cyprus, Cyprus)

Zhenhan Yao (姚振漢) (Tsinghua University, China)

Frank Young (楊德良) (National Taiwan University, Taiwan)

Zi-Cai Li (李子才) (National Sun Yat-sen University, Taiwan)

Scientific Committee

Q.H. Qin (Australia)

T. Tran-Cong (Australia)

Bert Pluymers (Belgium)

Wen Chen (陳文) (China)

Zhenhan Yao (姚振漢) (China)

De-Hao Yu (余德浩) (China)

Andreas Karageorghis (Cyprus)

Robert Schaback (Germany)

Benny Hon (Hong Kong)

Leevan Ling (Hong Kong)

C. Gaspar (Hungary)

Eisuke Kita (Japan)
J. G. Ih (Korea)
S. W. Kang (Korea)
Ismael Herrera (Mexico)
Jan Kolodziej (Poland)
Andrzej Zieliński (Poland)
Carlos Alves (Portugal)
Vitor Leitao (Portugal)
Antonio Tadeu (Portugal)
J.A. Teixeira de Freitas (Portugal)
Gui-Rong Liu (Singapore)
Chang Shu (Singapore)
Vladimir Kompis (Slovakia)
Bozidar Sarler (Slovenia)
Jan Sladek (Slovakia)
Vladimir Sladek (Slovakia)
Jiang-Ren Chang (張建仁) (Taiwan)
Cha`o-Kuang Chen (陳朝光) (Taiwan)
Jiahn-Horng Chen (陳建宏) (Taiwan)

Local Committee in Taiwan

Fu-Chuen Chang (張福春) (Kaohsiung)
I-Lin Chen (陳義麟) (Kaohsiung)
Chieh-Sen Huang (黃杰森) (Kaohsiung)
Hung-Tsai Huang (黃宏財) (Kaohsiung)
D. C. Lo (羅德章) (Kaohsiung)
Tzon-Tzer Lu (呂宗澤) (Kaohsiung), Chair
Chia Cheng Tsai (蔡加正) (Kaohsiung)
Ngai-Ching Wong (黃毅青) (Kaohsiung)
Kuo-Ming Lee (李國明) (Tainan)
Tzyy-Leng Horng (洪子倫) (Taichung)

Important Dates

- (a) First/Second/Third Call for Papers: June, July, August 2010. Reminders will be sent as frequent as necessary
- (b) Deadline for submission of special session/mini-symposium proposal: August 2010
- (c) Abstract/Paper due: October 2010/February 2011
- (d) Conference dates: March 15-18 (Tuesday-Friday), 2011. 4 days including one or half day excursion.

Conference Proceedings/Journal Special Issue

- Abstracts, short and full length papers, and posters are accepted.
- A booklet for conference program and abstracts will be published on conference date.
- Abstracts and papers will be published in a CDROM or memory stick on conference date.
- Posters will be on display at conference site.

Wen-Hwa Chen (陳文華) (Taiwan)
I-Liang Chern (陳宜良) (Taiwan)
Hong-Ki Hong (洪宏基) (Taiwan)
Shyh Rong Kuo (郭世榮) (Taiwan)
Ming-Chih Lai (賴明治) (Taiwan)
Chein-Shan Liu (劉進賢) (Taiwan)
Gee-Pinn Too (涂季平) (Taiwan)
Wei-Chung Yeih (葉為忠) (Taiwan)
Daniel Lesnic (United Kingdom)
Edward Maunder (United Kingdom)
Henry Power (United Kingdom)
Pihua Wen (United Kingdom)
Graeme Fairweather (USA)
Paul A. Martin (USA)
P.A. Ramachandran (USA)

Hsin-Yun Hu (胡馨云) (Taichung)
Shih-Chung Chiang (蔣世中) (Hsinchu)
Ming-Gong Lee (李明恭) (Hsinchu)
Shyue-Yuh Leu (呂學育) (Hsinchu)
Lih-Jier Yeong (楊立杰) (Hsinchu)
Wei-Ming Lee (李為民) (Taipei)
Chia Ming Fan (范佳銘) (Keelung)
Chao-Kuang Hsueh (薛朝光) (Keelung)
Kue-Hong Chen (陳桂鴻) (Ilan)

- Selected papers will be solicited to be published in a special issue of SCI indexed journal (to be determined).

Conference History

International Workshop on the Trefftz Method

- First Workshop: Cracow, Poland, 1996.
- Second Workshop: Sintra, Portugal, 1999.
- Third Workshop: University of Exeter, UK, 2002.
- Fourth Workshop: University of Zilina, Slovakia, 2005.
- Fifth Workshop: Katholieke Universiteit Leuven, Belgium, 2008.

Workshop on Method of Fundamental Solutions

- First Workshop: Ayia Napa, Cyprus, 2007.

Conference sessions

- 7 plenary talks 40 minutes each.
- Contributed talks 20 minutes each.
- An award competition for student posters.

Contact person

Hung-Tsai Huang (黃宏財): scicomp@math.nsysu.edu.tw

Kaohsiung City

