

CALL FOR PAPERS

Trefftz-Type Methods for Vibration Problems Symposium



11th International Conference on Vibration Problems

Lisbon, Portugal, September 9-12, 2013

The symposium

The “Trefftz-Type Methods for Vibration Problems” symposium is part of the 11th International Conference of Vibration Problems (ICOVP-2013) that will be held between September 9th and 12th, 2013, in Lisbon, Portugal .

Trefftz-type methods are a class of numerical methods for solving boundary-value problems. As opposed to the Rayleigh-Ritz strategy, Trefftz methods seek the combination of free-field solutions of the governing equation that best fits its initial/boundary conditions. Consequently,

Trefftz methods yield approximation bases that contain physically meaningful information, making them particularly well suited for modelling wave propagation phenomena. For instance, in a finite element context, this means that the elements are insensitive to the wavelength of the propagating waves, endorsing the use of frequency-independent meshes of “supersized” elements. Moreover, Trefftz formulations typically lead to boundary integral descriptions of the discretized problems, thus lifting the restrictions placed on the topological complexity of the domain/elements.

In the last decades, the Trefftz concept has been used with different implementation techniques, leading to differently coined methods, such as Fundamental Solution Methods, Boundary Element Methods, Wave-Based Methods, Hybrid-Trefftz Methods and even some classes of Meshless/Meshfree Methods.

The symposium is meant as a forum for the dissemination of theoretical advances and practical applications of any of the Trefftz-type methods, in the field of dynamic modelling. Multidisciplinary communications are especially encouraged and the presence of authors from different scientific fields will actively be sought.

The submission

Authors wishing to contribute to the “Trefftz-Type Methods for Vibration Problems” symposium (MS12) should prepare a **single page abstract** (less than 2200 characters with spaces) following the instructions that can be found [here](#) and submit it **online** using the [Conference page](#). **The deadline for the abstract submission is January, 31st, 2013.** All accepted abstracts will be published in Book of Abstracts, ICOVP-2013 with ISBN attributed.

Submission of **full-length papers** is not mandatory, but highly recommended. It will only be possible after the respective abstract is accepted. Papers supporting accepted abstracts will be published in proceedings. **Selected full-length papers** of ICOVP-2013 will be published in the following journals:

- [Journal of Sound and Vibration](#) (Elsevier);
- [International Journal of Mechanical Sciences](#) (Elsevier).

The deadline for the full-length paper submission is May, 31st, 2013.

Important dates

Deadline for abstract submission:	January 31 st , 2013
Acceptance/rejection notification:	February 15 th , 2013
Full-length paper submission (optional):	May 31 st , 2013
Early registration:	May 31 st , 2013
Conference dates:	September 9 th – 12 th , 2013

Please check the relevant registration information on the conference site

Session organizers

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