

5TH INTERNATIONAL WORKSHOP ON Functional Structural Plant Models

CALL FOR PAPERS

Napier, New Zealand 4–9 November 2007

IMPORTANT DATES

Abstracts due March 14 26, 2007

Notification of acceptance May 31, 2007

Final abstracts due June 29, 2007

Full papers due December 10, 2007

ORGANIZERS

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Alla Seleznyova HortResearch Local Organization ASeleznyova@hortresearch.co.nz Functional-structural plant models combine one or more elements of plant function with spatially-explicit models of plant architecture. Applications include fundamental plant biology, and decision support systems for agriculture, horticulture, and forestry. The workshop FSPM07, the fifth in the series, will be held in Napier, New Zealand, November 4–9, 2007. Paper submissions are invited in all aspects of functional-structural plant modeling, including, but not limited to:

- Functional-structural models of plants and plant communities e.g. regulation of plant development and structure; resource acquisition, transport, allocation, and use; plant biomechanics; hormonal control and signaling; plant interaction with the environment;
- Models of plant environments
 - e.g. light, water, temperature, insects, pathogens;
- Molecular-level computational biology of plants
 - e.g. models of auxin transport; molecular genetics of plant development;
- Models of plant tissues and organs;
- Biological concepts underpinning FSPM
 - e.g. autonomy and competition between plant modules;
- Mathematics and algorithms for FSPM
 - e.g. L-systems, Markov chains, Petri nets, multiresolution modeling;
- Modeling software;
- Applications of FSPM to horticulture, agriculture, and forestry;
- Applications of FSPM to fundamental biology;
- Experimental methods for FSPM
 - e.g. measurements of plant architecture, microscopic imagery;
- Validation and verification of FSPM:
- Visualization of FSPM.

Paper submission

Extended abstracts of oral presentations (3 pages) and abstracts of posters (1 page) are solicited. All abstracts will be reviewed by the Program Committee, following the same submission and notification deadlines. All accepted abstracts will be included in the workshop proceedings.

Special issue of Functional Plant Biology

Authors of accepted abstracts are invited to submit a full paper to the special FSPM07 issue of Functional Plant Biology (Volume 35, Issue 5, 2008). All topics included in the conference program are eligible.

Further information: http://www.algorithmicbotany.org/FSPM07/

Paper submission site: http://www.algorithmicbotany.org/FSPM07/submit