

"Future Trends in Interactive Geometry"

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A Session in the Frame of CADGME 2009.

Interactive (or Dynamic) Geometry software (DGS) is an accepted tool for teaching mathematics now. Those who are accepting the use of computers in schools are well aware of the potential of these software packages, and there exist lots of resources, pre-designed activities, explorations, illustrations, and exercises that can be used off-the-shelf to exploit a great part of this potential.

However, in recent years several new trends and developments have emerged: some packages allow for a tighter integration with algebraic and symbolic approaches, some offer novel user interfaces, others include methods for numeric simulation, etc. As these developments are unfamiliar to most users (teachers and scientists), there is no or little formal evidence of their usefulness or evaluation results.

This session tries to give an overview over both innovative approaches to DGS and innovative use of traditional DGS, and to demonstrate how these could be applied to mathematical education. We invite submissions on the subject of

- Innovative features of DGS,
- Specialized and experimental DGS,
- Interaction between DGS and other mathematical software
- Interaction between DGS and the real world,
- New mathematical methods that are used to improve DGS,
- Non-standard classroom activities that make use of new features or make creative use of "old features",
- Evaluation results for DGS use that could be used to identify new directions in the development of DGS,
- Usability studies for DGS,
- and other topics that are related to the above.

Submission of papers to the Session on " Future Trends in Interactive Geometry " should proceed via the ordinary submission procedure of CADGME but should be marked by "Session FTIG".