



mini-symposium algebra & ICT

programma

13:00 – 13:30 Ontvangst

13:30 – 14:00 *Paul Drijvers* (UU): Introduction: why algebra & ICT?

14:00 – 15:00 *Johan Jeuring* (UU/OU): Hints and feedback in learning environments for algebra - technology for following and helping students

15:00 – 15:30 Pauze

15:30 – 16:30 *Abraham Arcavi* (Weizmann Institute, Israel): Technology at the service of algebra learning

16:30 Afsluitende borrel

abstracts

Johan Jeuring (UU/OU): Hints and feedback in learning environments for algebra – technology for following and helping students

The Ideas framework gives hints and feedback to students when interactively solving exercises in learning environments such as the Digital Mathematical Environment from the Freudenthal Institute. Typical examples of such exercises are solving linear and quadratic equations, calculating fractions, etc. In this talk I will show the framework at work in example exercises, and I will introduce important concepts that play a role by means of examples of desired behavior when a student solves an exercise.

Op dinsdag 13 december 2011 organiseert het Freudenthal Instituut een mini-symposium over het onderwerp *algebra & ICT*, in het bijzonder rond de volgende vragen:

- Wat is het probleem met algebraonderwijs in het VO?
- Kan ICT een rol spelen in het oplossen hiervan?

Twee gerenommeerde sprekers zullen vanuit verschillende invalshoeken deze vragen belichten. Het mini-symposium is bedoeld voor leraren, studenten, opleiders en onderzoekers.

praktische informatie

- Wanneer:* dinsdag 13 december 2011, 13:00 – 17:00
- Waar:* Wentgebouw, zaal Groen, Sorbonnelaan 16, Uithof, Utrecht.
- Routebeschrijving:* www.uu.nl/NL/contactenroutes/routesenplattegronden
- Kosten:* deelname aan het mini-symposium is gratis
- Aanmelden:* stuur een email naar Rita van Poorten, r.vanpoorten@uu.nl
- Informatie:* zie www.fisme.uu.nl/fisme/minisymposiumalgebraict
- Taal:* de lezingen worden in het Engels gegeven

Abraham Arcavi (Weizmann Institute, Israel): Technology at the service of algebra learning

Computer Algebra Systems are the most common technological environments at the service of the teaching and learning of algebra. However, it is worthwhile to consider other environments which may provide teaching and learning opportunities for some aspects of algebra. I will exemplify and discuss the design of activities for a dynamic geometry environment in which symbolic and Cartesian models of a geometrical phenomena interact and enrich each other with the potential to support the learning of some aspects of algebra.

For a related paper by Arcavi see <http://flm-journal.org/FLMArcavi.pdf>

