

Mathematics of Planet Earth

21 december 2013, 12.30-17.30

Educatorium Utrecht

Sprekers

Prof. Ken Golden, Mathematics and the melting polar ice caps

In September of 2012, the area of the Arctic Ocean covered by sea ice reached its lowest level ever recorded in more than three decades of satellite measurements. In fact, compared to the 1980's and 1990's, this represents a loss of more than half of the summer Arctic sea ice pack. While global climate models generally predict sea ice declines over the 21st century, the precipitous losses observed so far have significantly outpaced most projections.

Prof. Ken Golden (Dept. of Mathematics, Univ. of Utah, USA) will discuss how mathematical models of composite materials and statistical physics are being used to study key sea ice properties and advance how sea ice is represented in climate models. This work is helping to improve projections of the fate of Earth's ice packs, and the response of polar ecosystems. In addition, an exciting video from a 2012 Antarctic expedition where sea ice properties were measured will be shown.

Zaal 1

- **Ute Ebert:** How thunderstorms create antimatter
- **Carel Eijgenraam:** Optimal dike heights in the Netherlands
- **Arjen Doelman:** Climate change, desertification and billiard

Zaal 2 (scholieren)

- **Antonios Zagaris:** Het onzichtbare onderwaterbos en de koolstofkringloop
- **Kees Roos:** Optimale dijkhoogten in Nederland
- **Ute Ebert:** Hoe werkt bliksem?

Programma

- 12.30-13.30: Inloop, markt, posters
- 13.30-14.30: Hoofdvoordracht Prof. Ken Golden
- 14.30-15.00: Pauze, markt, posters
- 15.00-16.15: Parallelsessie
- 16.15-17.30: Borrel, markt, posters

Registratie via www.platformwiskunde.nl

Reageer snel, er is een beperkt aantal plaatsen



Prof. Ken Golden



**Dagvoorzitters zijn
Ionica Smeets en
Sofie van den Enk,
bekend van het
KRO-programma
'Eureka'**

MPE2013 is een wereldwijd initiatief om te laten zien wat wiskunde kan betekenen voor de uitdagingen waarvoor we ons gesteld zien met betrekking tot klimaatveranderingen, duurzaamheid, natuurrampen, ecologie, biodiversiteit, epidemiologie, politieke/economische systemen en vele andere aspecten.

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