

KAVLI INSTITUTE FOR THEORETICAL PHYSICS

Presents

the Thirty Seventh KITP Public Lecture

co-sponsored by Friends of KITP and UCSB Department of Mathematics

Robbert Dijkgraaf

Mathematics and the Quantum Universe

What is the role of mathematics in understanding the unified structure of the smallest particles and the largest structures in the universe? Are the laws of Nature necessarily written in beautiful and elegant equations? Recent ideas in string theory and cosmology seem to suggest that this might indeed be the case. At the same time the often counterintuitive ideas from quantum physics have also transformed modern mathematics itself, and have led to new insights in the abstract world of algebra and geometry.

About the Speaker

ROBBERT DIJKGRAAF (1960) is Distinguished University Professor of Mathematical Physics at the University of Amsterdam and from May 2008 the President of the Royal Netherlands Academy of Arts and Sciences. He studied theoretical physics and mathematics in Utrecht, where (after an interlude studying painting) he obtained his Ph.D. cum laude under supervision of Gerard 't Hooft in 1989. Subsequently he held positions at Princeton University and the Institute for Advanced Study. He is a member of a research group that works in string theory, quantum gravity, and the interface of mathematics and particle physics. He is also interested in creating more public awareness of mathematics and science, and bridging the gap with the arts and humanities, for example as a monthly columnist for the newspaper *NRC Handelsblad*. He was the recipient of the 2001 Physica Prize of the Dutch Physical Society and the 2003 NWO Spinoza Prize, the highest scientific award in the Netherlands.

Wednesday, July 30, 2008

8:00 PM (Reserved seats held until 7:50 PM)

Kavli Institute for Theoretical Physics, Main Seminar Room



Admission is Free
Seating is by RSVP only

Please email:

events@kitp.ucsb.edu

or call

(805) 893-4111

by July 25th, 2008.

**Reserved seats are held
until 7:50 pm**

*To make special arrangements to
accommodate a disability, call the
KITP at the number above.*

LOT 10 PARKING

From the roundabout at Hwy 217, turn right onto Mesa Rd, merge into left lane, turn left at the first light into Lot 10 parking structure. **PARK, BUY a \$3 permit** from the dispenser (near the elevator and stairs), **DISPLAY PERMIT** on dashboard. The KITP is right next door.

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its many friends in the community.*

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