

MAGIC PICTURES ABOUT HIGGS BUNDLES

Speaker: Professor Tamás Hausel
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Date: Thursday, 7 August 2014

Time: 6:30 - 7:30 pm

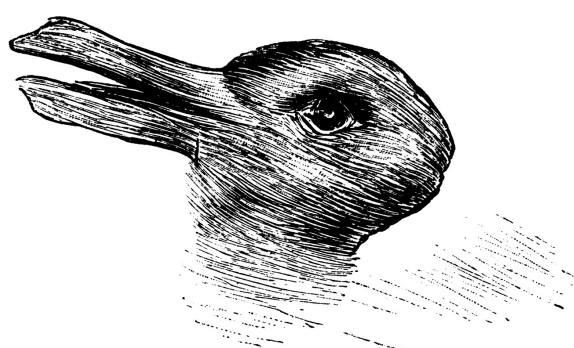
Venue: LT31, Block S16, Level 3
Faculty of Science
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Free Admission

Abstract

A traditional puzzle, going back to centuries, is a "magic picture". The task is to find a figure, for example a person or animal, hidden in some otherwise normal looking picture. Some versions depict objects which can be viewed at different angles and perceived as different entities. We will show some examples of such magic pictures in a mathematical context. Such a mathematical magic picture serves as a dictionary between two otherwise unrelated mathematical theories. Our magic pictures will be about Higgs bundles, which are at the center of investigations in theoretical physics and many fields of mathematics, including geometry, number theory and representation theory. In particular, the original definition of Higgs bundles was motivated by the mathematical theory of the famous Higgs particle which was recently found in the Large Hadron Collider in CERN, Geneva.

Welche Tiere gleichen ein-
ander am meisten?



Kaninchen und Ente.



About the Speaker

Tamás Hausel's research interests include, among others, algebraic, combinatorial and differential geometry, number theory and mathematical physics. He is Professor and Head of the Chair of Geometry at the Swiss Federal Institute of Technology in Lausanne. He was on the faculty of University of Oxford and University of Texas previously. He held a Royal Society University Research Fellowship in Oxford, a Miller Research Fellowship in Berkeley, and a membership at the Institute for Advanced Study in Princeton. He received an Alfred Sloan Fellowship, the Whitehead Prize of the London Mathematical Society and an Advanced Grant of the European Research Council.

