HERTZ LECTURE.

DESY Lecture on Physics 2016

The Frontiers of Fundamental Physics

Prof. Dr. Nathan Seiberg
(Institute for Advanced Study, Princeton)

29 September 2016
17:30 h, DESY Auditorium
Notkestraße 85 | 22607 Hamburg | Germany
http://www.desy.de/hertz

Accelerators | Photon Science | Particle Physics

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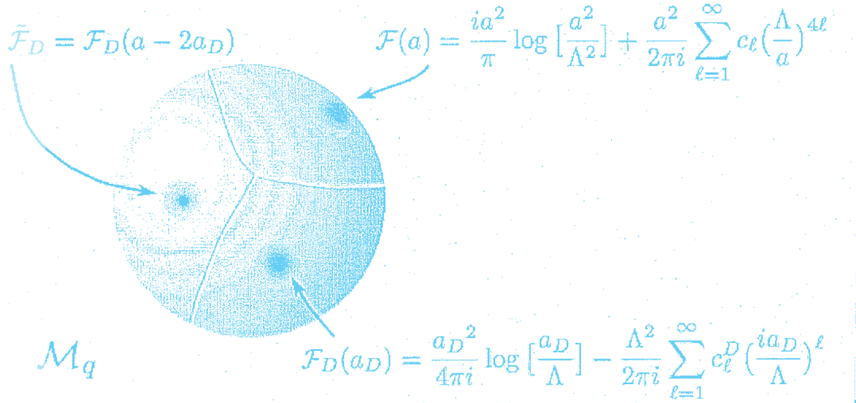


In recent decades, physicists and astronomers have discovered two beautiful Standard Models, one for the quantum world of extremely short distances, and one for the universe as a whole. Both models have had spectacular success, but there are also strong arguments for new physics beyond these models.

In this lecture, Seiberg will review these models, their successes and their shortfalls. He will describe how experiments in the near future could point to new physics suggesting a profound conceptual revolution, which could change our view of the world.

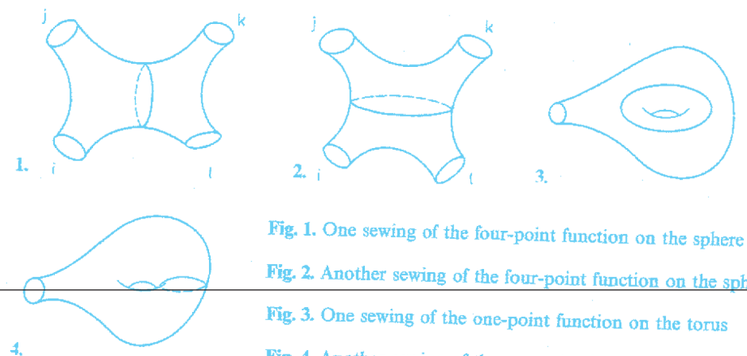
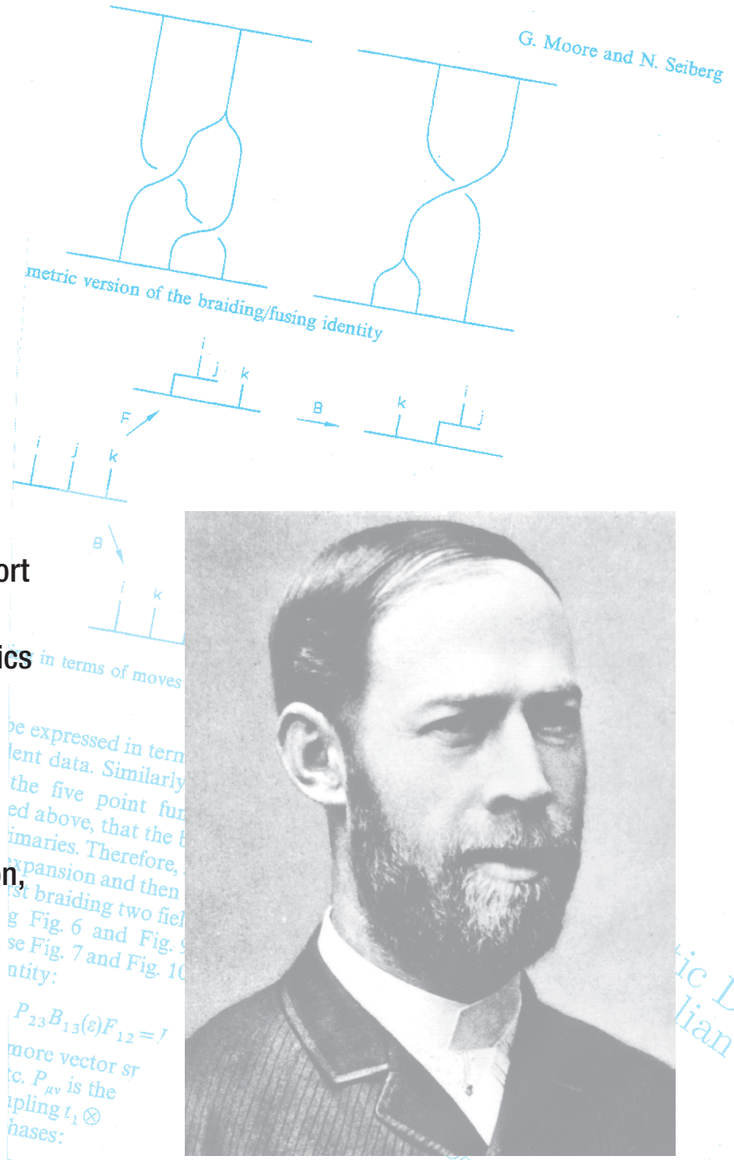


Fig. 1. One sewing of the four-point function on the sphere

Fig. 2. Another sewing of the four-point function on the sphere

Fig. 3. One sewing of the one-point function on the torus

Fig. 4. Another sewing of the one-point function on the torus



Heinrich Hertz
1857 Hamburg-Karlsruhe-Bonn 1894

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