

A A R H U S U N I V E R S I T E T



Center for the Topology and
Quantization of Moduli Spaces



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CTQM
NIELSEN LECTURE

SUBFACTORS

TUESDAY, AUGUST 19, 2008 AT 15:30 IN AUDITORIUM F AT THE DEPARTMENT OF MATHEMATICAL SCIENCES
FACULTY OF SCIENCE, UNIVERSITY OF AARHUS

ABSTRACT: A factor is a von Neumann algebra with trivial centre. Group algebras of discrete groups give interesting examples and subgroups lead to subfactors of a very special kind. After a survey of the founding results in the theory-index, bimodules, planar algebras, loop group constructions and more, we will discuss more recent results on pairs and more general subfactor families including angles and Bisch-Haagerup subfactors.

CTQM
MASTER CLASS

PLANAR ALGEBRA

AUGUST 25 – 29, 2008, CTQM, DEPARTMENT OF MATHEMATICAL SCIENCES
FACULTY OF SCIENCE, UNIVERSITY OF AARHUS

ABSTRACT: Planar algebra is algebra in which operations are indexed by planar diagrams called tangles with inputs being discs in the diagram. We will discuss various notions of planar algebra from the operadic point of view. Relations will appear with knot theory, statistical mechanics, combinatorial group theory, quantum groups and most of all, subfactors. They lead to many different algebraic structures according to the particular planar tangles chosen. Of particular interest recently have been graded algebra structures which give connections with the large N limit of random matrices and free probability. Subfactor planar algebras are rather special in many ways among planar algebras and will receive most attention.

CTQM WILL HOST A RECEPTION AFTER THE NIELSEN LECTURE

FOR FURTHER INFORMATION, PLEASE CONTACT
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