



UNIVERSITY OF CALIFORNIA  
RIVERSIDE

DEPARTMENT OF MATHEMATICS  
**COLLOQUIUM**

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**DR. DIETMAR BISCH**  
VANDERBILT UNIVERSITY

“SUBFACTORS WITH INFINITE  
REPRESENTATION THEORY”

Since the discovery of the Jones polynomial in the 1980's, it is well-known that subfactors of von Neumann factors are intimately related to quantum topology. A subfactor is said to have infinite representation theory, if its standard representation generates infinitely many non-equivalent irreducibles. Such subfactors are hard to construct, and very few methods are known to produce interesting examples. I will highlight one such procedure, due to Jones and myself. The construction yields new  $C^*$ -tensor categories and solutions of the quantum Yang-Baxter equation. I will try to make the talk accessible to non-experts.

WEDNESDAY, APRIL 26<sup>TH</sup>, 2017

SURGE 284

TEA TIME 3:40 P.M.

TALK BEGINS 4:10 P.M.