## universität**bonn**

# **Bethe** Colloquium

### **Peter Scholze**

Mathematical Institute of the University of Bonn

#### Hyperbolic 3-manifolds and Galois representations

A large part of modern number theory deals with the relation between algebraic objects and analytic objects, as in the famous Shimura-Taniyama-Weil conjecture relating elliptic curves with modular forms, whose proof by Wiles, completed by Taylor et. al., lead to the solution of Fermat's Last Theorem. I will try to explain the general Langlands conjectures underlying this picture, and describe some recent results, in particular in the situation mentioned in the title.



#### Lecture Hall 1

Physikalisches Institut - Nussallee 12 - 53115 Bonn

Thursday, 27<sup>th</sup> October, 2016, at 16 c.t.

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