



Universität Stuttgart



Kolloquium des Fachbereichs Mathematik

Es spricht am Montag, **25. November 2024** um **14:00 Uhr**

Professor Dr. Péter P. Pálffy (Alfréd Rényi Institute of Mathematics,
Budapest, Hungary)

zum Thema: "**Galois's theorems on $PSL(2,p)$** "

Abstract

In his "testamentary letter" Galois claims (without proof) that the groups (using modern notation) $PSL(2,p)$ are simple for every prime number $p > 3$ and they do not contain any subgroup of index p , whenever $p > 11$. Moreover, he gives examples that for $p = 5, 7, 11$ such subgroups do exist.

The attempt by Betti in 1853 to give a proof does not seem to be complete. Jordan's proof in his 1870 book uses methods certainly not known to Galois. Nowadays we deduce Galois's result from the complete list of subgroups of $PSL(2,p)$ obtained by Gierster in 1881.

In the talk I will try give a proof that might be close to Galois's own thoughts.

Der Vortrag findet im Sitzungssaal 8.122 der Fakultät Mathematik und Physik, Pfaffenwaldring 57, 70569 Stuttgart-Vaihingen statt.

Interessenten sind herzlich eingeladen!

Die Dozentinnen und Dozenten des Fachbereichs Mathematik