

MATHEMATIKKOLLOQUIUM

Das Institut für Mathematik lädt zu folgendem Vortrag ein:

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Quadratic quasigroup equations with four variables

We consider a class of functional equations with one operational symbol which is assumed to be a quasigroup. Equations are quadratic, level and have four variables each. Therefore, they are of the form $x_1x_2 \cdot x_3x_4 = x_5x_6 \cdot x_7x_8$ with $x_i \in \{x, y, u, v\}$ ($1 \leq i \leq 8$) with each of the variables occurring exactly twice in the equation. There are 105 such equations. They separate into 19 equivalence classes of equations defining 19 quasigroup varieties. Further, there are 7 varieties defined by several of the equations.

The graph of the partially ordered set of all these varieties is given.

This (partially) generalizes the results of recent papers by W. Förg-Rob & A. Krapez and M. Polonijo.

Zeit: **Dienstag, den 20. November 2007 um 17:15 Uhr**

Ort: **Viktor-Franz-Hess-Haus, Technikerstraße 25, HS D**

Wolfgang Förg-Rob

Gäste sind herzlich willkommen!