

Visit to Vienna University of Technology

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INVESTICE DO ROZVOJE VZDĚLÁVÁNÍ

- institution: Vienna University of Technology
- date: January 2nd – January 8th, 2012
- guarantee:
Ao.Univ.Prof. Dipl.-Ing. Dr.techn. Helmut Länger

TU Vienna was founded in 1815. Nowadays it is the largest technical and scientific education and research institutions in Austria and is rated as one of the best technical universities in Europe. TU Vienna has eight faculties:

- Faculty of Architecture and Planning
- Faculty of Civil Engineering
- Faculty of Mechanical and Industrial Engineering
- Faculty of Electrical Engineering and Information Technology
- Faculty of Mathematics and Geoinformation
- Faculty of Physics
- Faculty of Technical Chemistry
- Faculty of Informatics.

The main topic: Algebras assigned to ternary relations

In collaboration with Ivan Chajda we show that to every centred ternary relation T on a set A there can be assigned (in a non-unique way) a ternary operation t on A such that the identities satisfied by $(A; t)$ reflect relational properties of T . We classify ternary operations assigned to centred ternary relations and we show how the concepts of relational subsystems and homomorphisms are connected with subalgebras and homomorphisms of the assigned algebra $(A; t)$. We show that for ternary relations having a non-void median can be derived so-called median-like algebras $(A; t)$ which become median algebras if the median $M_T(a, b, c)$ is a singleton for all $a, b, c \in A$. Finally, we introduce certain algebras assigned to cyclically ordered sets.

- algebraic seminar ...
- coffee room ...