

# Mathematical Institute CAS, v. v. i.

## Brno branch

Žižkova 22, 616 62 Brno  
URL: <http://www.math.cas.cz>  
Phone: +420 549 246 314  
Fax: +420 541 218 657  
E-mail: [hakl@math.cas.cz](mailto:hakl@math.cas.cz)



## Overview

Research in the branch is focused in three directions. Most attention is devoted to the qualitative theory of differential and difference equations, especially the issues of solvability of boundary value problems, stability and asymptotic properties of their solutions. Another direction involves selected areas of theoretical computer science, e.g. the theory of supervision management of automata and timed automata with an emphasis on decentralized, hierarchical coordination and management, computing and descriptive complexity, and theory of grammars and formal languages. The third direction is the geometry and topology of  $G$ -structures on differentiable manifolds, reduction of principal fibered spaces for different subgroups their structural groups. Since 2003, the branch regularly hosts a seminar on *Qualitative theory of ordinary and functional differential equations*. The speakers present their own results and interesting results emerging in the literature.

## Organizational structure

The Brno branch is a division of the Mathematical Institute CAS based in Prague, Žitná 25.

## Projects and grants

Currently, the branch is involved in the A-Math-Net project under the Operational Programme Education for Competitiveness co-financed by the European Social Fund and the state budget. The branch also works on projects supported by the Grant Agency of the Czech Republic.

## International cooperation

The branch works with a number of foreign research institutions and regularly organizes international conferences and seminars.

## Cooperation with universities

Most staffers work at Brno universities, either as employees or external staff, they supervise doctoral students and act as external members of the state exam committee. Occasionally they lecture at universities abroad.

## **Public services**

The Brno branch staffers are members of editorial boards of international journals, they regularly organize Open Days in the framework of the Week of Science and Technology and they co-organize mathematical competitions.