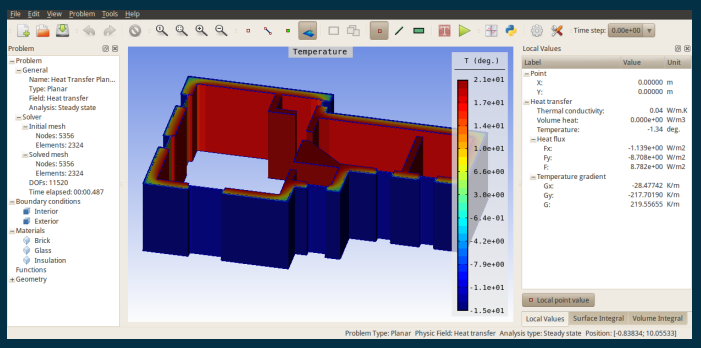
Agros2D

http://hpfem.org/agros2d

University of West Bohemia, Pilsen
University of Nevada, Reno



Agros2D is a multi-platform application for the solution of field problems in various engineering areas. It is written in C++ on top of the Hermes library which employs adaptive hp-FEM to solve efficiently the undelying partial differential equations (PDE) and PDE systems. Agros2D is distributed under the GPL license.

Physical fields:

- electrostatics
- electromagnetics
- electric current
- thermal field
- incompressible flow
- linear elasticity

Analysis types:

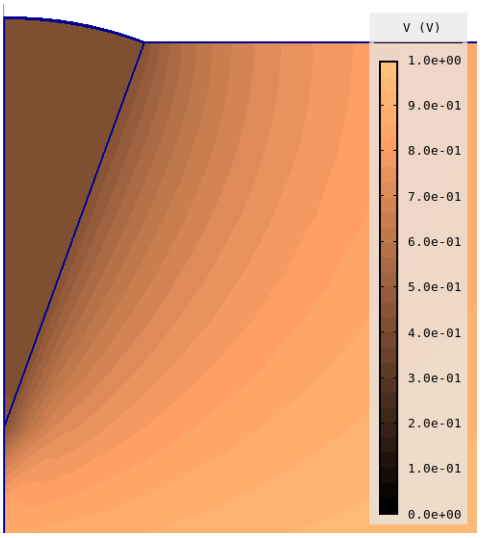
- steady state
- harmonic
- transient

Operating systems:

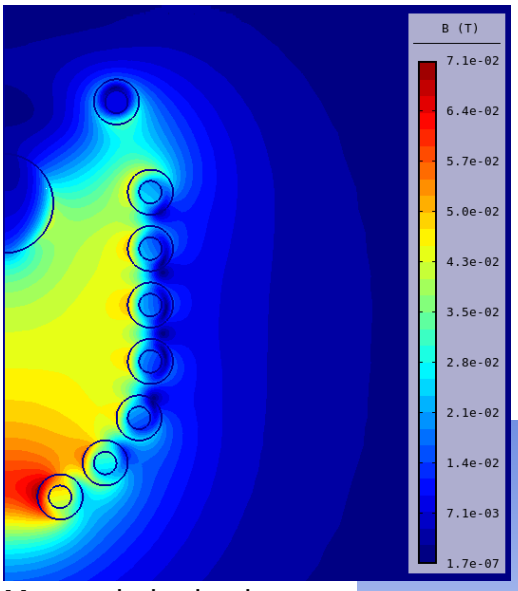
- Linux
- MS Windows
- Mac OS

Brief Overview:

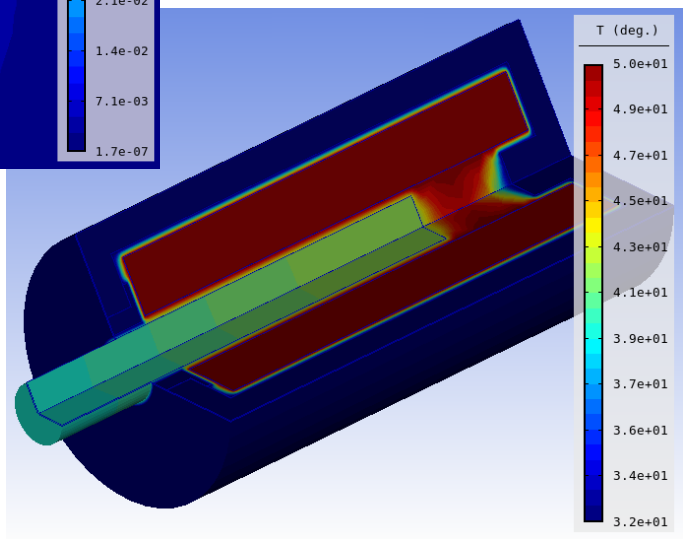
- Multi-platform application (Linux, Windows, Mac)
- Interactive geometry modeling and CAD import
- Advanced visualization of field quantities
- Postprocessing of local variables such as volume and surface integrals
- Scripting support for Python
- Export of images, graphs, and computed data
- Export of animations for transients
- Reports in HTML format
- Interoperability with Matlab and other systems



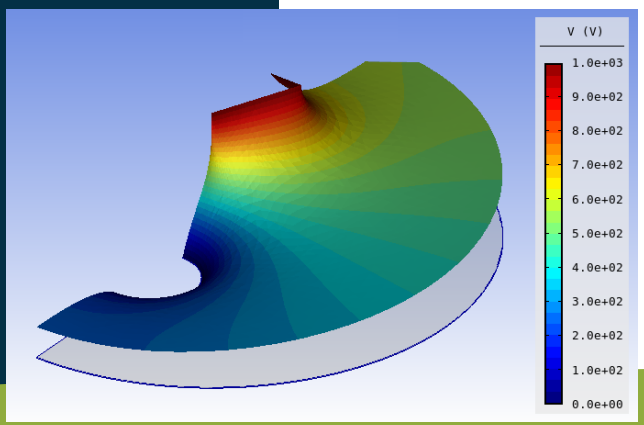
Electric current field of a silicon grain.



Magnetic levitation.



Thermal field of an electromechanical actuator.



Electrostatic spark gap.