

## Meilenstein 2: Bestandsaufnahme relevanter Projekte



PAVIAN

PARsing and  
VISualization of  
ARithmetic  
NOTations

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$$-\frac{p}{2} \pm \sqrt{\frac{p^2}{4} - q}$$

## Gliederung:

- ✓ Parser von mathematischen Formeln (Java)
- ✓ Darstellung/Zeichnen im Browser (Applet)
- ✓ Umwandlung
  - MathML-> LaTeX
  - LaTeX -> MathML

# Projekte:

## → Parser von mathematischen Formeln

- **HotEqn** is a Java applet to view and display mathematical equations on the Web.
- **JSCL** java symbolic computing library and math editor
- **Qalculate!** is a modern multi-purpose desktop calculator for GNU/Linux
- **ASCIIMathML** a JavaScript to convert calculator-style ASCII math notation
- **MESP** Parser for mathematical expressions written in Java
- **Impression** is the flexible and extensible parser of mathematical expressions written in Java
- **SCCALC** scientific calculator and math expression parser
- **MathML in Mozilla** An implementation of the W3C's Mathematical Markup Language
- **ChkTeX** LaTeX semantic checker
- **JEP** Java package for parsing and evaluating mathematical expressions
- **Latex Equation Comp.** a preprocessor for LaTeX files
- **Math.NET** including a parser and support for linear algebra, complex differential...
- **Jex** a Java Equation Editor for Open Office

# Projekte:

## → Darstellung/Zeichnen im Browser (Applet)

- › **JUNG** modeling, analysis, and visualization of data
- › **TouchGraph** a set of interfaces for Graph Visualization using spring-layout focus+context t.
- › **GtkMathView** a C++ rendering engine for MathML documents
- › **Vofce** simple GUI graph plotting tool with a wide range of exporting features
- › **GNUrant** Java library to draw graphs, particularly Maths functions

# Projekte:

- Umwandlung  
MathML-> LaTeX  
LaTeX -> MathML

- ***XSLT MathML Library*** is set of XSLT stylesheets for MathML 2.0 to LaTeX translation
- **xml to LaTeX XSL** These stylesheets output LaTeX code from a DocBook (c) XML document.
- **Ganttproject** export the project in HTML Web pages or PDF document (using XSLT) or image files

# Fragen???

