releases / mathematics / html / pdf

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Guidedog contributors

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Abstract

Write formulas as MathML that needs no script, typeset authored MathML in PDF, embed pictures in HTML fragments, and check every formula.

Guidedog can now write formulas as MathML, which a browser shows without a script. An application that shows converted pages inside its own can also ask for a self-contained HTML fragment. The setting `html_math_renderer = "mathml"` writes each formula as a MathML Core `math` element. `guidedog build --math=mathml` does the same for one build, and `guidedog convert --math=mathml` for one file. The page loads no MathJax, and equation numbers, labels and `:eq:` references keep working. MathJax stays the default, and its output is unchanged.

The `math` directive takes `:notation: mathml` for a formula written in MathML itself. HTML writes it through an allowlist filter for MathML Core. PDF translates the same filtered MathML to Typst math, so the book shows a typeset, numbered formula.

`guidedog convert --embed-pictures` draws graphs, Typst diagrams and inline scores into the HTML as SVG `data:` images. The drawing runs under the confinement of a build, within bounds on the count and size of the pictures. `guidedog convert --keep-going` writes the output of a document with errors and still reports them.

Every LaTeX formula is now checked once when a document is read, whatever the output is. A warning points at the first fault and proposes a correction. A command MathJax typesets is never reported as unknown. These are warnings, so a build with `-W` that held such a formula now fails on it.

The mathematics guide describes both math renderers, MathML notation and the math check. The command reference lists the new options and their bounds.