

1116-00-1947      **Peter Krautzberger\***, American Mathematical Society, 201 Charles Street, Providence, RI 02904-2294, and **Davide Cervone** and **Volker Sorge**. *Evolving Math Web Standards from a Usability Perspective*.

The Open Web Platform provides a radical new medium for human expression. Efforts to bring mathematical notation to this setting have a long history, but math continues to struggle to find its place within it. The proposed `<math>` element in HTML3 was removed, but led to the creation of MathML, whose success in the XML world drove its re-introduction into HTML5. Despite this, MathML's deployment in browsers remains extremely limited.

Like most areas, mathematics has initially transferred pre-existing idioms, such as print layout and computational notation, to the web. But it has failed to evolve alongside the rapid developments on the web.

With support from the Alfred P. Sloan Foundation, MathJax has developed refined heuristics for semantic enrichment of Presentation MathML. This was driven by practical usability issues to provide responsive rendering of mathematics together with assistive technology for navigation, exploration, and summarization in the context of education and disability support. Enriching the presentation directly instead of separating it out as Content MathML follows modern web-development practices, and we believe our results can inform standards development to help move mathematics towards original forms of expression on the web. (Received September 21, 2015)