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Accessibility Features for Advanced Mathematics in the new MathJax Version 3.

MathJax is a Javascript library for TeX-like typesetting of Mathematics on the web. Since its beginnings one of its goals is to provide accessibility support for blind and visual impaired people; either by supporting third party assistive technology or, more recently, via it's own integrated accessibility extension.

In MathJax's new version 3 the accessibility extension is not only again an important aspect but has been considerably improved in terms of the information it can provide on formulas. With support from the Simons Foundation we developed improved semantic recognition of source material as well as means to exploit context information in documents. One particular emphasis is to provide better accessibility to advanced mathematical material exploiting information gained from the original LaTeX code, to provide more appropriate speech for different areas of Mathematics but also for subjects like Physics, Chemistry and Logic. Our aim is to ease the study of mathematics for more people with visual impairments as well as to encourage subject specialists to contribute via better authored content, semantically meaningful LaTeX packages, and expert knowledge for speech generation. (Received September 25, 2018)