The author has written an open-source Pascal compiler which targets WebAssembly, meaning that Knuth’s TeX source can be compiled to something which runs in a web browser. Combining this with dvi2html, the resulting DVI can be rendered to HTML, with PGF specials rendered as SVG. (This permits us to build TikzJax, i.e., a tool akin to MathJax but for rendering figures built with TikZ).

Making TeX a first-class citizen on the web yields additional benefits to OER. With “isomorphic git” the usual git commands can also be run from within a web browser, so TeX worksheets stored on GitHub can be cloned to a web browser, compiled in the web browser, and viewed and edited by students, all without involving a server. This talk will demonstrate this technology and some of the interactive Ximera features built around it. (Received September 15, 2019)