1163-57-1271       **Dylan P Thurston\***, Rawles Hall, 831 E Third St, Bloomington, IN 47405-7106. *Hopf algebras and framed sutured 3-manifolds.* Preliminary report.

We strengthen the relationship between Hopf algebras and 3-manifolds (following Greg Kuperberg and Rohit Thomas), by giving a correspondence between, on the algebraic side, open Hopf algebra expressions (with some free variables), and, on the geometric side, sutured 3-manifolds with markings. Among other benefits, this gives a purely geometric interpretation of the Drinfel'd Double construction.

This is joint work-in-progress with Roland van der Veen. (Received September 15, 2020)