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Uwe Kaiser* (ukaiser@boisestate.edu), Department of Mathematics, Boise State University, 1910 University Drive, Boise, ID 83725. *On Conway and HOMFLYPT Skein Theory*. Preliminary report.

We show how incompressible tori and 2-spheres give rise to torsion in Conway and HOMFLYPT skein modules and how this is related with string topology. We review Cornwell's result on the generating set of the HOMFLYPT skein module of lens spaces $\neq S^2 \times S^1$. We speculate how his approach might be extended to other 3-manifolds using contact geometry, in particular with respect to recent results of Schweitzer and Souza on Legendrian knots in $S^1 \times S^1 \times S^1$. (Received January 20, 2015)