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Jessica Purcell and **Alexander Zupan*** (zupan@unl.edu). *Hyperbolic volume and higher genus bridge numbers*. Preliminary report.

By a theorem of Jorgensen and Thurston, the Heegaard genus of a closed hyperbolic 3-manifold gives a linear lower bound on its volume. For knots in the 3-sphere, the classical bridge number is analogous to the Heegaard genus, and so it is natural to ask whether there is any relationship between the bridge number and volume of a hyperbolic knot. We show that genus g bridge numbers and hyperbolic volumes are independent by producing sequences of knots with bounded volume and arbitrarily large genus g bridge numbers, and vice versa. (Received September 21, 2015)