

1058-57-111

De Witt Sumners* (sumners@math.fsu.edu), Department of Mathematics, Florida State University, Tallahassee, FL 32306. *Are large codimension 2 spheres knotted with high probability?* Preliminary report.

We would like to prove that almost all sufficiently large (in area) 2-spheres in the 4-dimensional cubic lattice are knotted, and have results for sufficiently large 2-spheres in tubes (see abstract of S.G. Whittington for this special session). I will discuss the problem of constructing knotted 2-spheres in the 4d lattice, and the general problem of detecting knots among randomly generated polyhedral 2-spheres in 4-space. This is joint work with Stu Whittington and Chris Soteros. (Received February 09, 2010)