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Y. Diao, Department of Mathematics and Statistics, University of North Carolina at Charlotte, Charlotte, NC 28223, C. Ernst*, Department of Mathematics and Comp. Science, Western Kentucky University, Bowling Green, KY 42101, A. Montemayor, Department of Mathematics and Comp. Science, Western Kentucky University, Bowling Green, KY 42101, and U. Ziegler, Department of Mathematics and Comp. Science, Western Kentucky University, Bowling Green, KY 42101. Generating random walks and polygons in spherical confinement.

We discuss algorithms or methods to generates confined equilateral random walks and polygons in spherical confinement. These algorithms result in different vertex distributions inside the confinement sphere. We discuss these vertex distributions and pros and cons of the various algorithms. (Received December 12, 2011)