In the paper on p. 153 of this issue of *MBoC*, Lawrimore et al. describe the application of ChromoShake, a three-dimensional simulator designed to find the thermodynamically favored states for given chromosome geometries, to a geometric model based on experimentally determined characteristics of the budding yeast centromere. In the model shown here, the spindle pole bodies (red disks) and kinetochore microtubules (green rods) depict a metaphase configuration. The colored strands represent the centromere regions of the 16 chromosomes. The centromere chromatin is shown under conditions of thermal fluctuation. Chromosome arms extend perpendicular to the spindle axis. Cohesin (white rings) is radially displaced from the spindle axis. (Image: Josh Lawrimore, Joseph K. Aicher, Patrick Hahn, Alyona Fulp, Ben Kompa, Leandra Vicci, Michael Falvo, Russell M. Taylor, II, and Kerry Bloom, University of North Carolina at Chapel Hill)