1067-20-462Juan Gonzalez-Meneses* (meneses@us.es), Dept. Algebra., Facultad de Matematicas. Univ.
de Sevilla., Apdo. 1160., 41080 Sevilla, Spain. Generating random braids.

In most papers in computational braid theory and braid cryptography, the method for generating braids of a given length consists of generating random words in the given generators. This is not satisfactory as it does not yield a uniform distribution, hence braids are not generated with identical probability. We will explain an efficient method to generate random positive braids. As a by-product, we will obtain a new and more efficient method for counting the number of positive braids of a given length. (Received September 05, 2010)