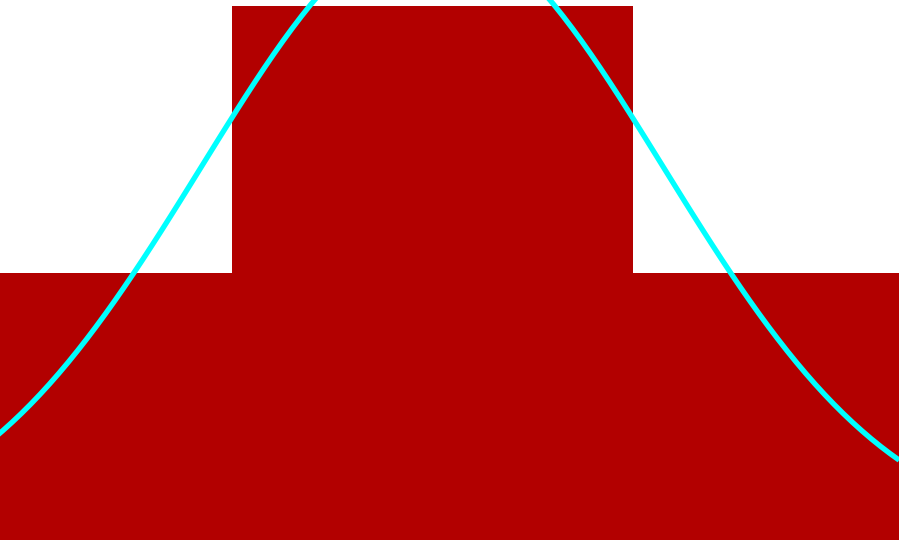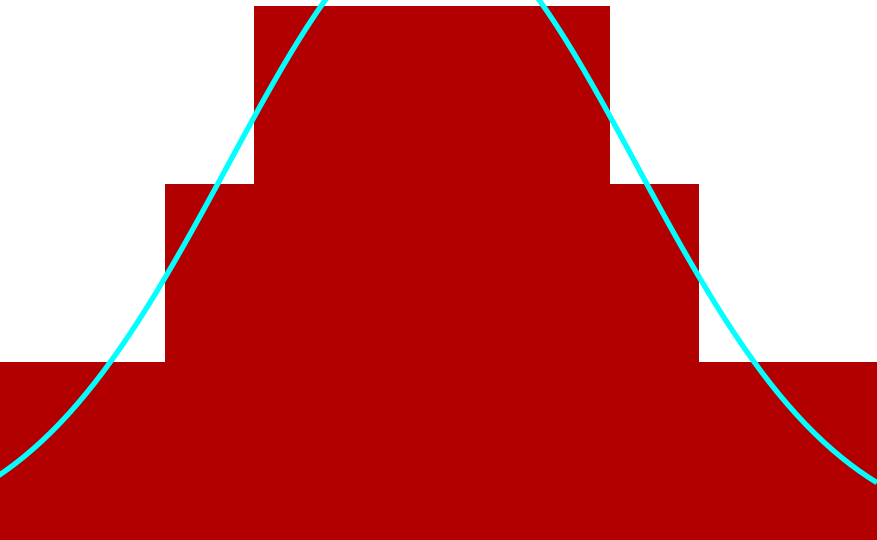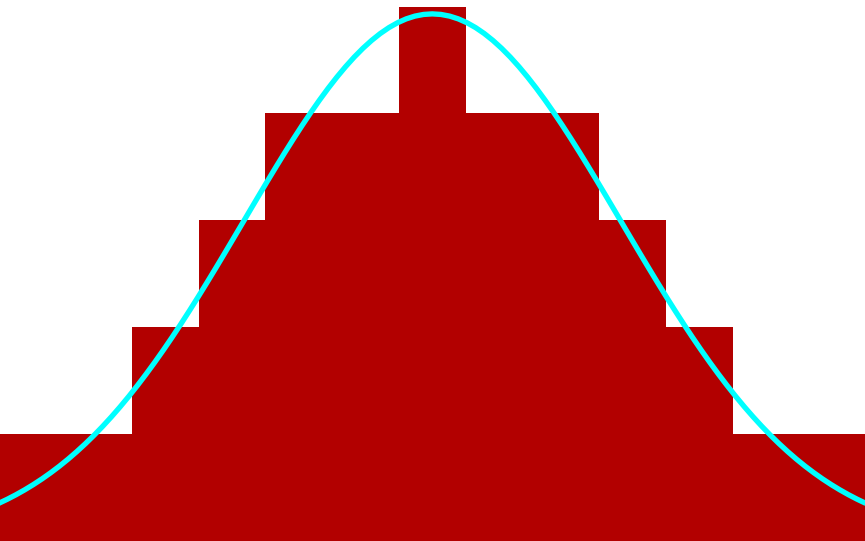weight distribution of $S^2(\sigma_3)$
dimension 10

weight distribution of $S^3(\sigma_3)$
dimension **20**

weight distribution of $S^4(\sigma_3)$
dimension 35

weight distribution of $S^5(\sigma_3)$
dimension 56

weight distribution of $S^6(\sigma_3)$
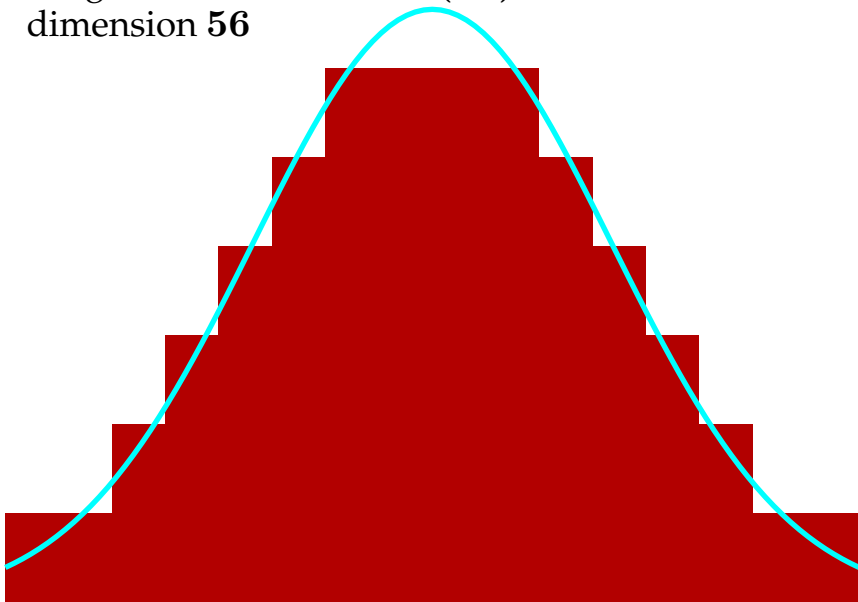dimension 84
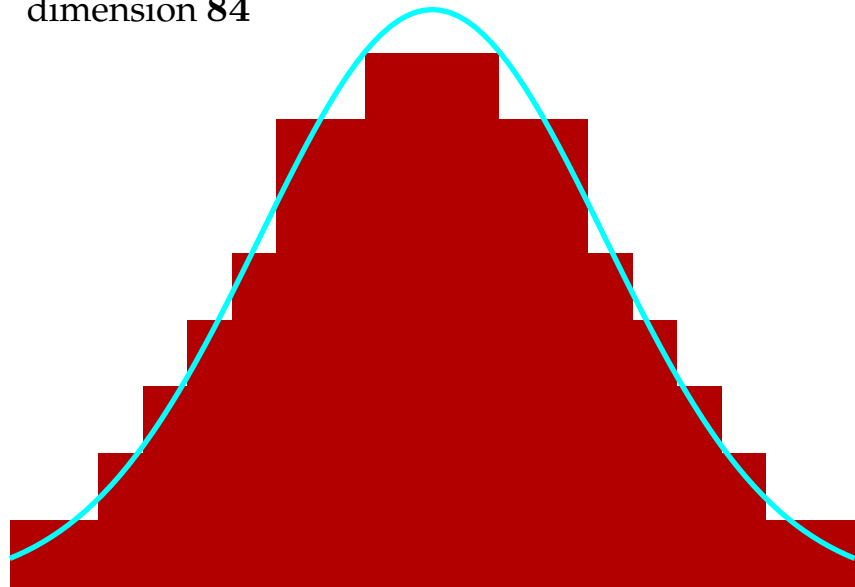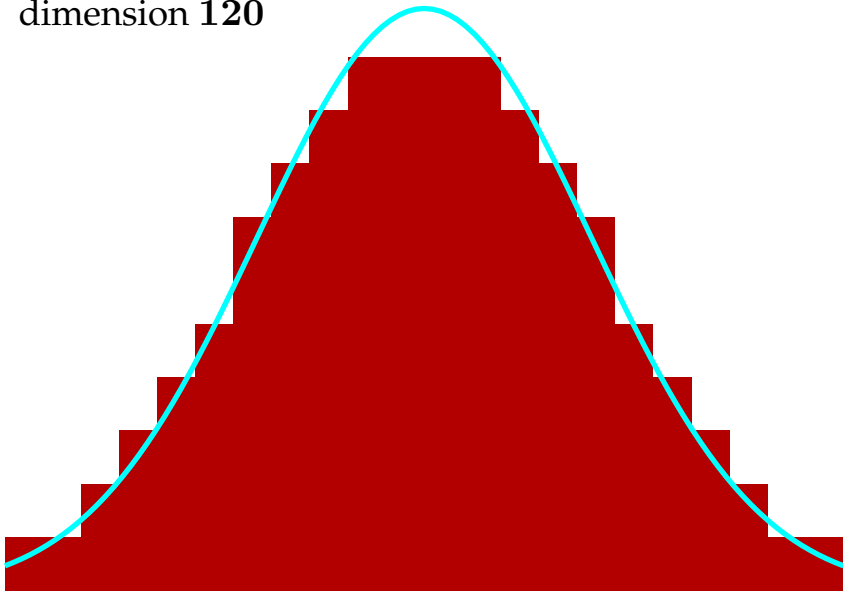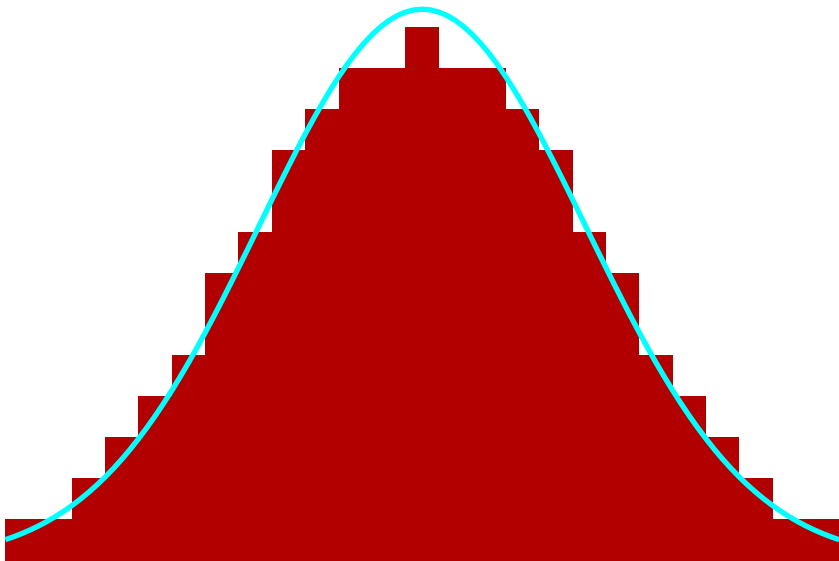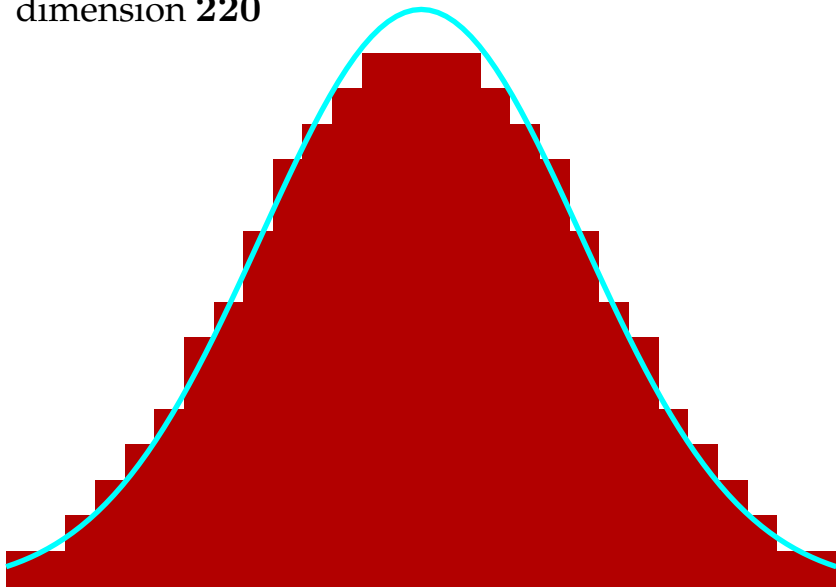
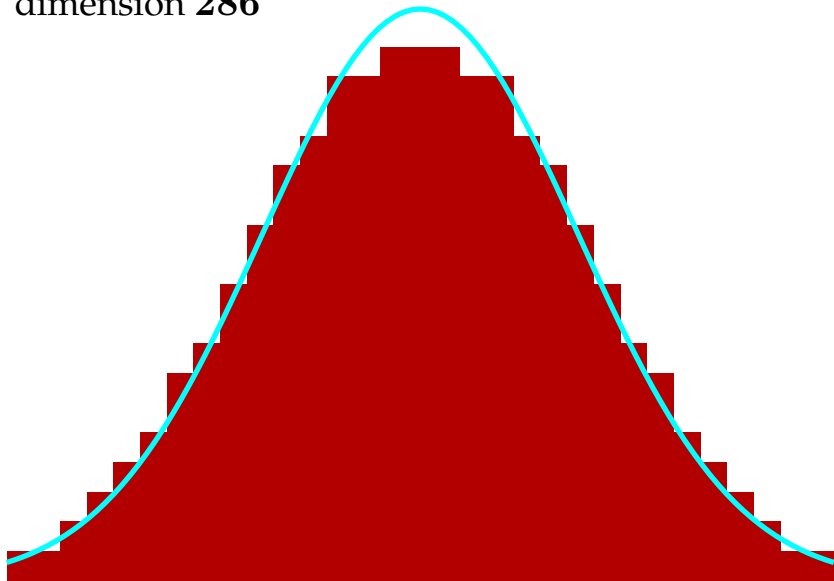weight distribution of $S^7(\sigma_3)$
dimension 120

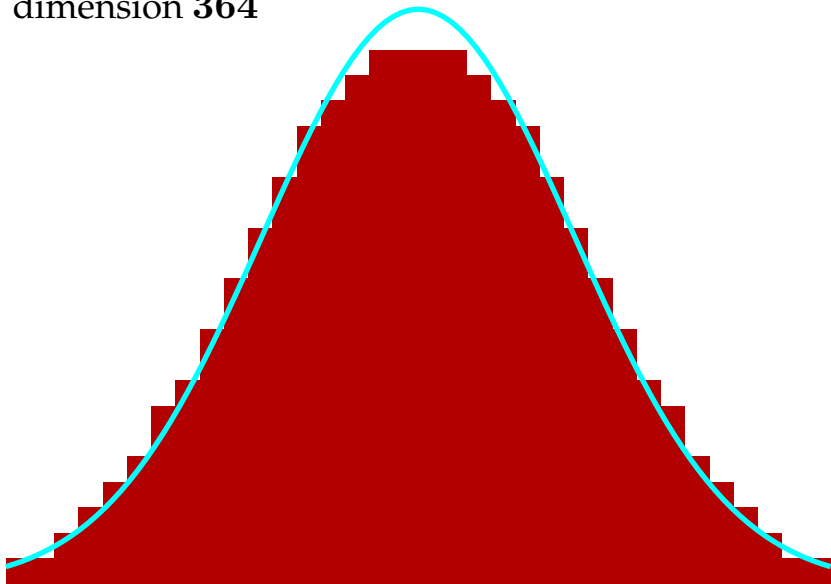weight distribution of $S^8(\sigma_3)$
dimension **165**

weight distribution of $S^9(\sigma_3)$
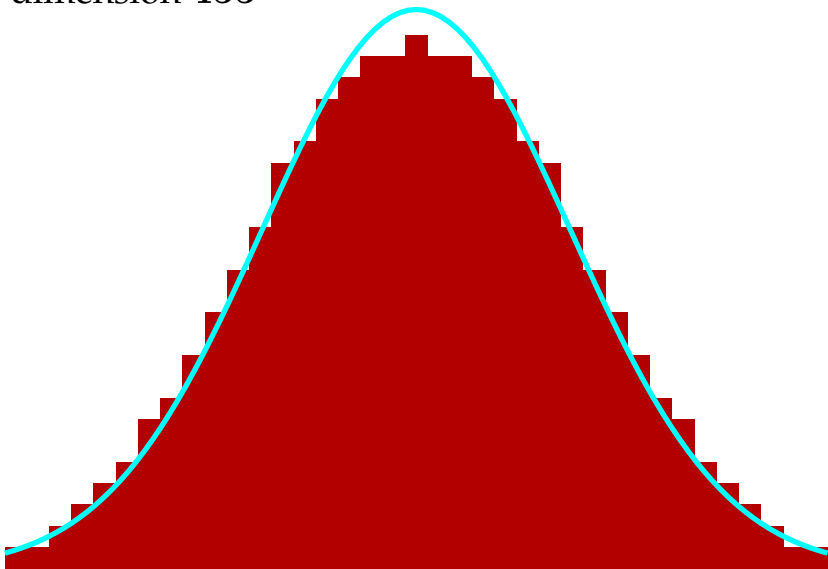dimension **220**

weight distribution of $S^{10}(\sigma_3)$
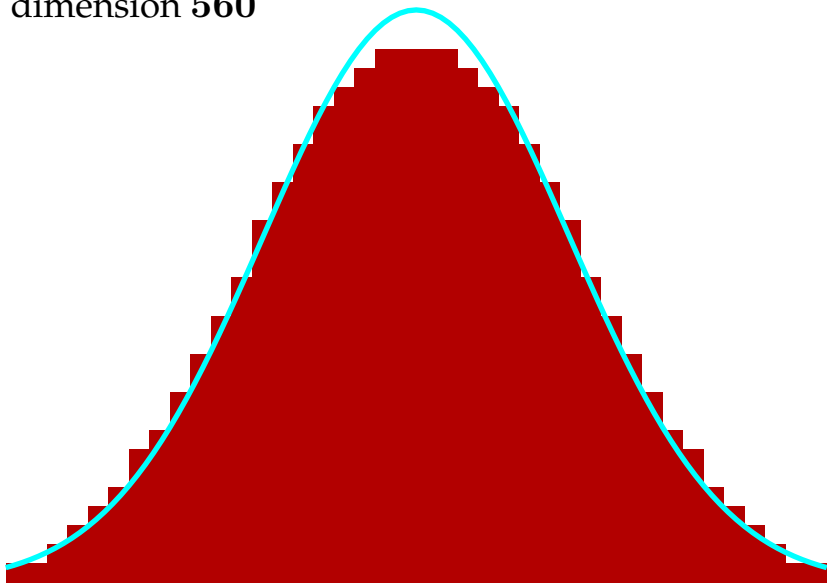dimension **286**

weight distribution of $S^{11}(\sigma_3)$
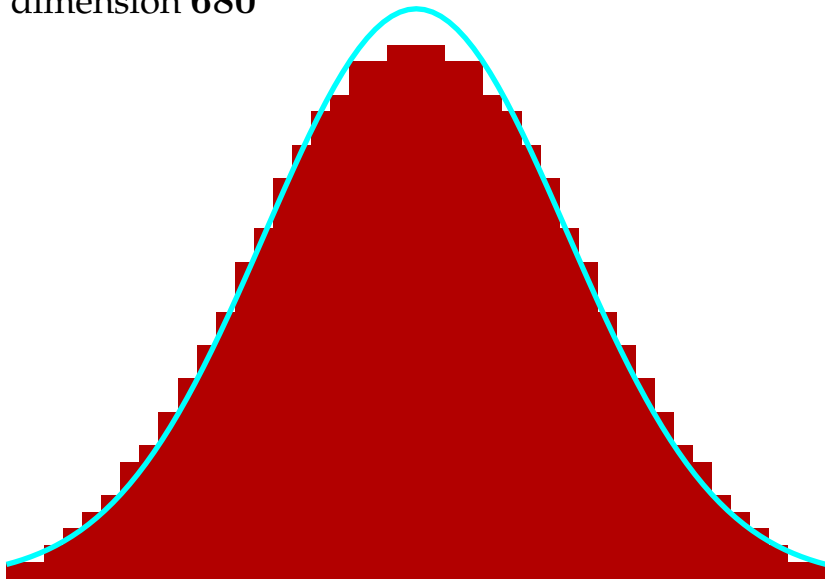dimension **364**

weight distribution of $S^{12}(\sigma_3)$
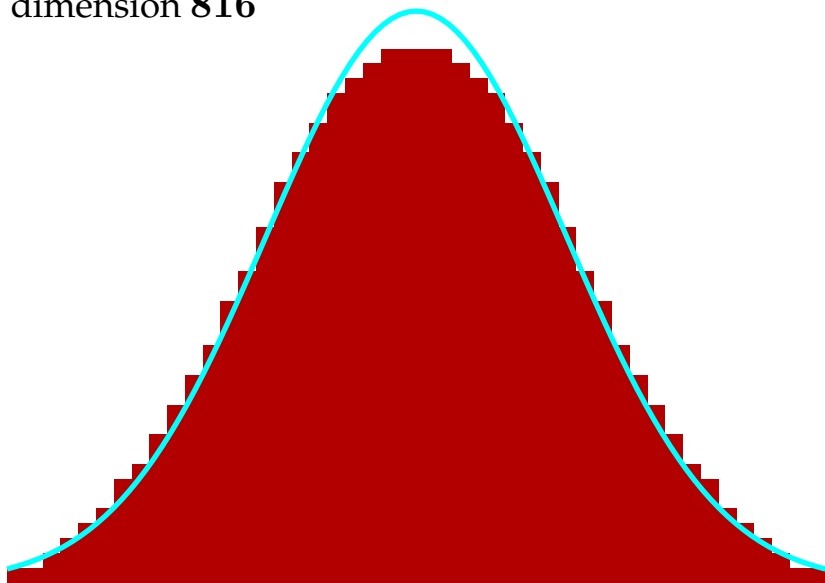dimension **455**

weight distribution of $S^{13}(\sigma_3)$
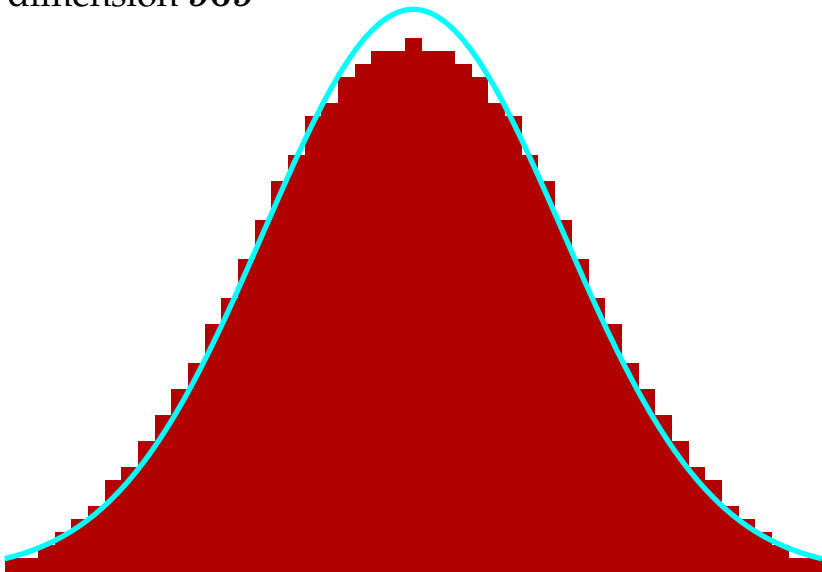dimension **560**

weight distribution of $S^{14}(\sigma_3)$
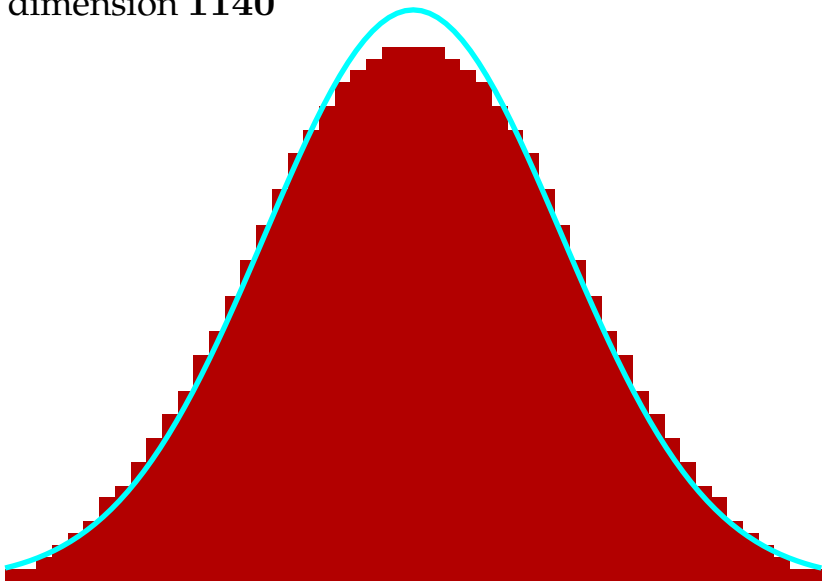dimension **680**

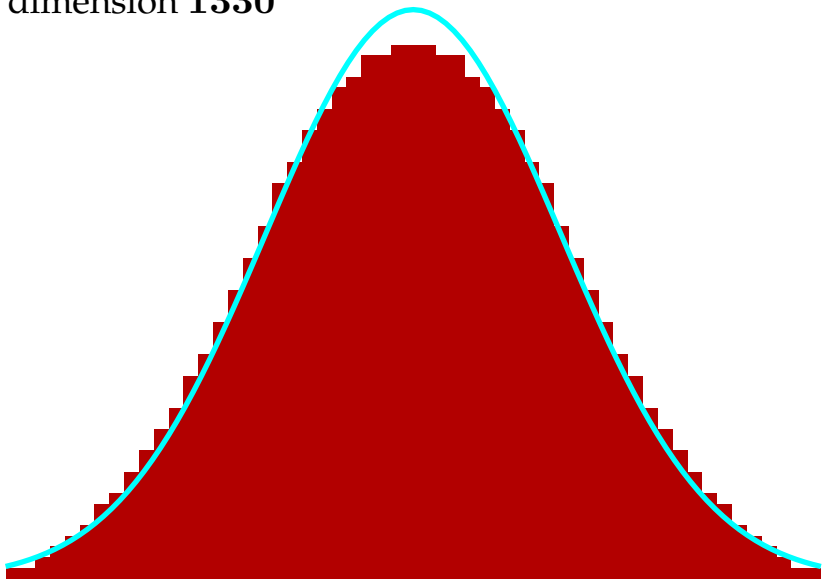weight distribution of $S^{15}(\sigma_3)$
dimension 816

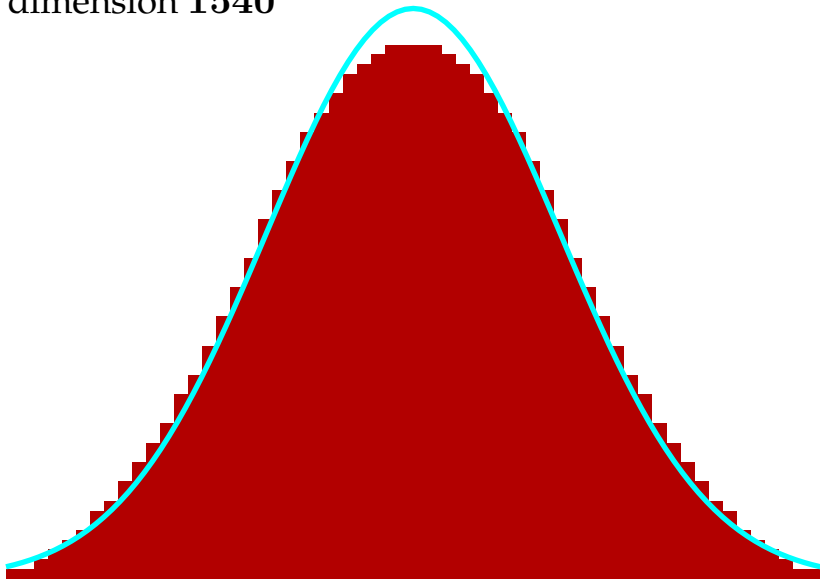weight distribution of $S^{16}(\sigma_3)$
dimension **969**

weight distribution of $S^{17}(\sigma_3)$
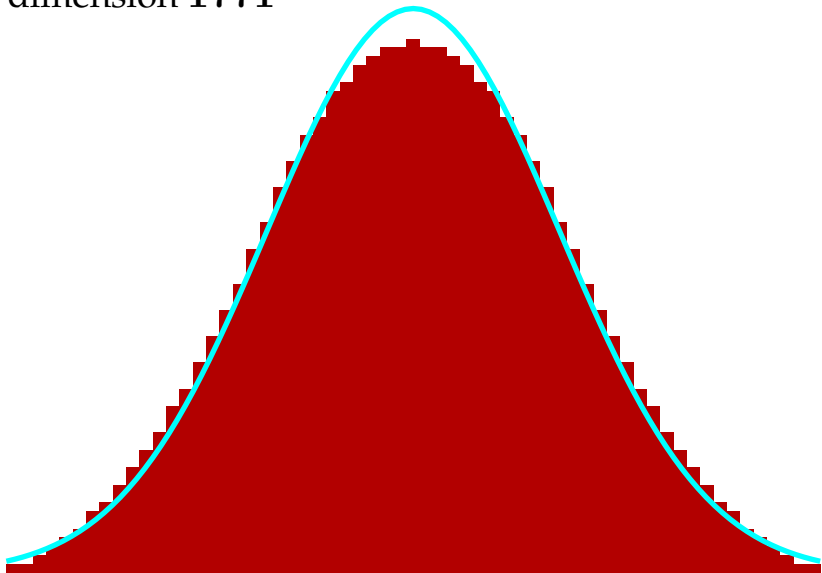dimension $\mathbf{1140}$

weight distribution of $S^{18}(\sigma_3)$
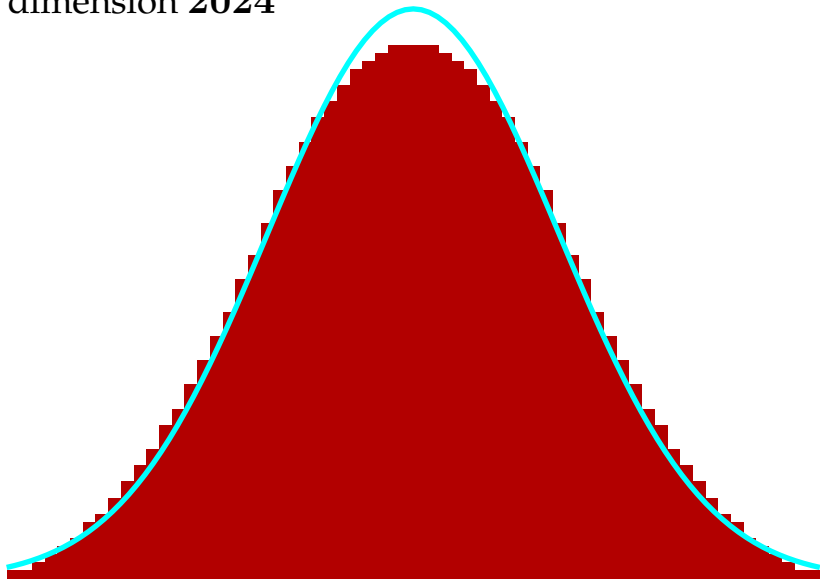dimension **1330**

weight distribution of $S^{19}(\sigma_3)$
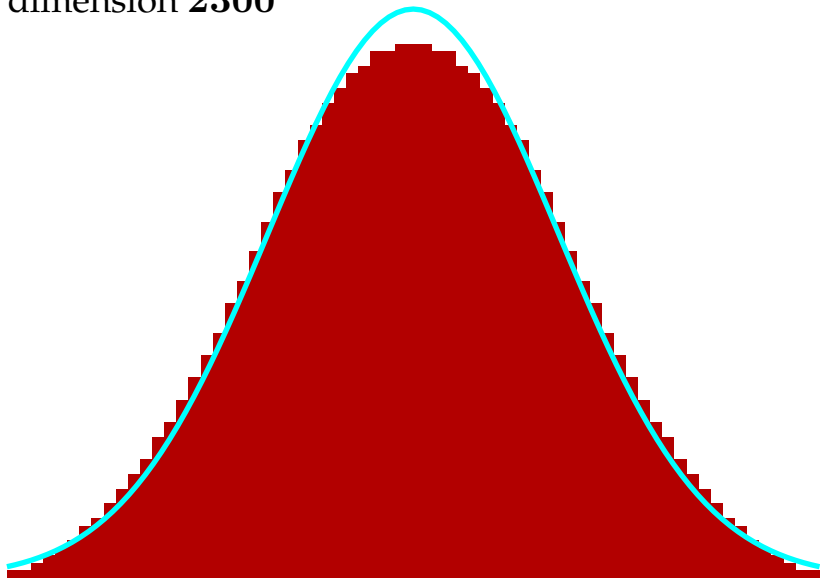dimension **1540**

weight distribution of $S^{20}(\sigma_3)$
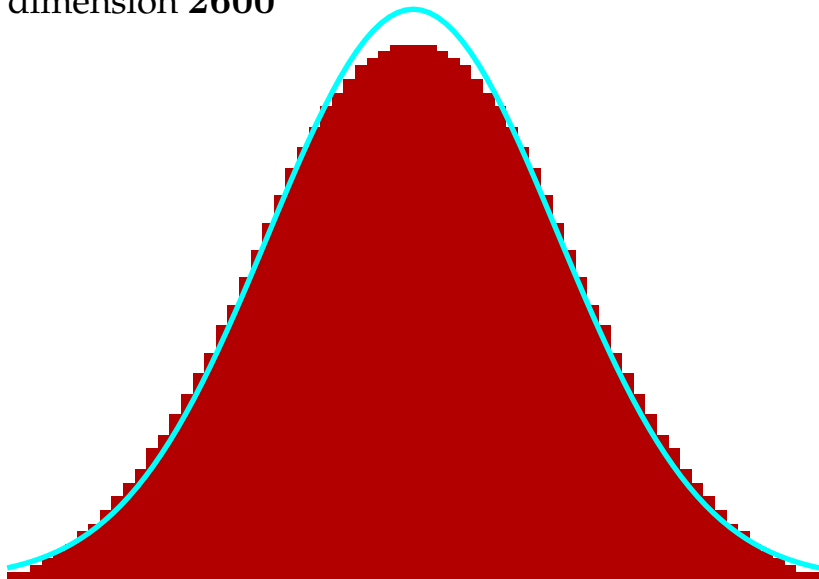dimension **1771**

weight distribution of $S^{21}(\sigma_3)$
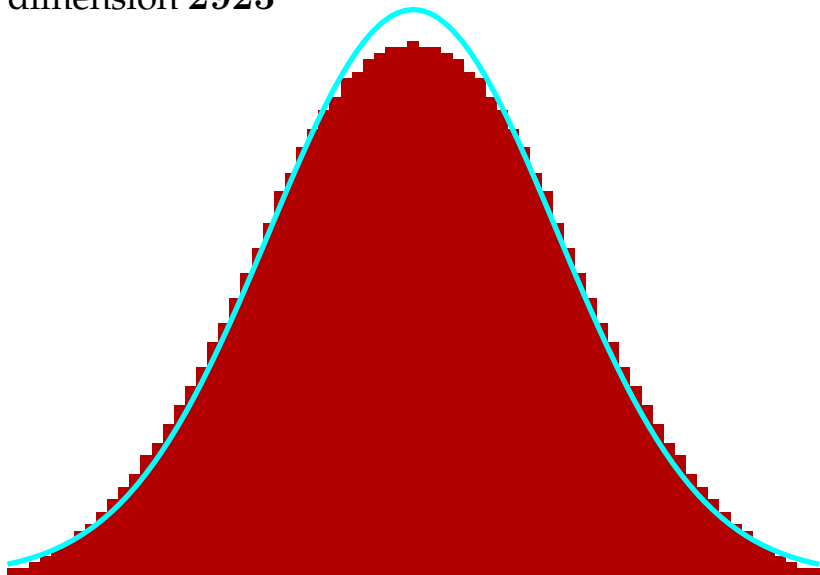dimension **2024**
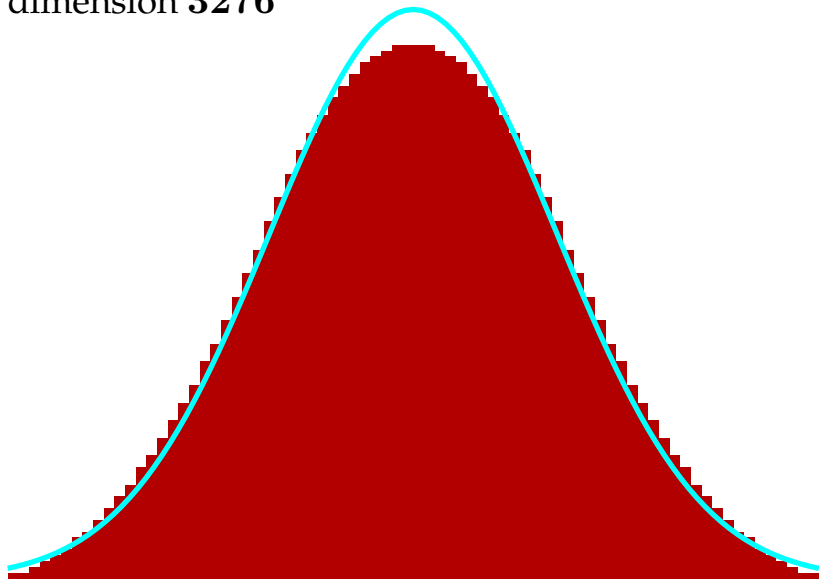
weight distribution of $S^{22}(\sigma_3)$
dimension **2300**

weight distribution of $S^{23}(\sigma_3)$
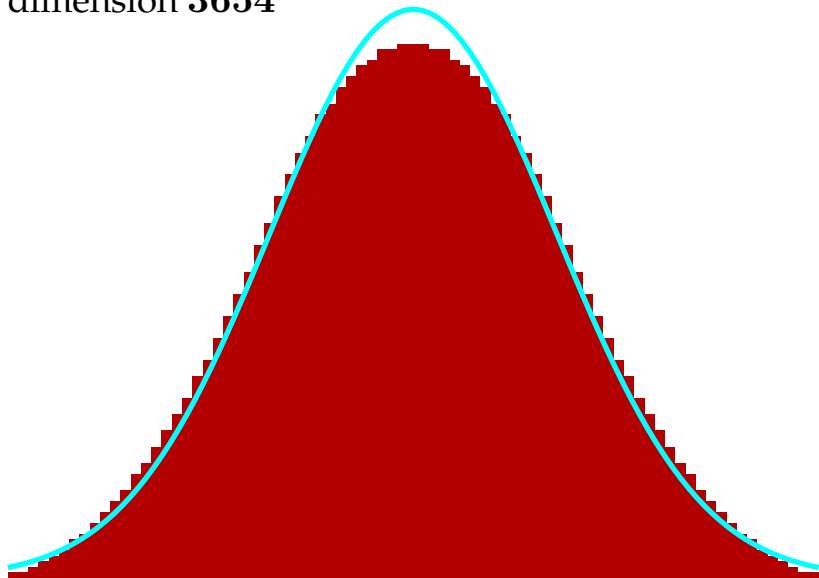dimension **2600**

weight distribution of $S^{24}(\sigma_3)$
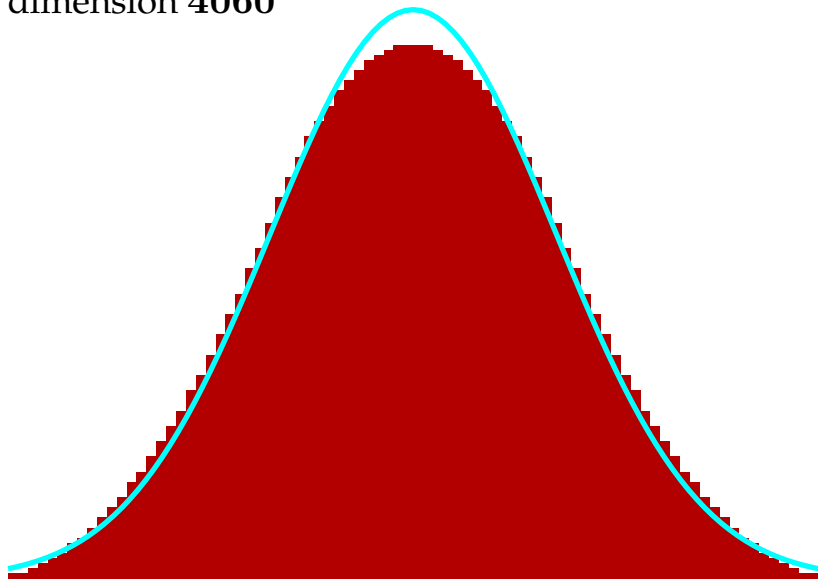dimension **2925**

weight distribution of $S^{25}(\sigma_3)$
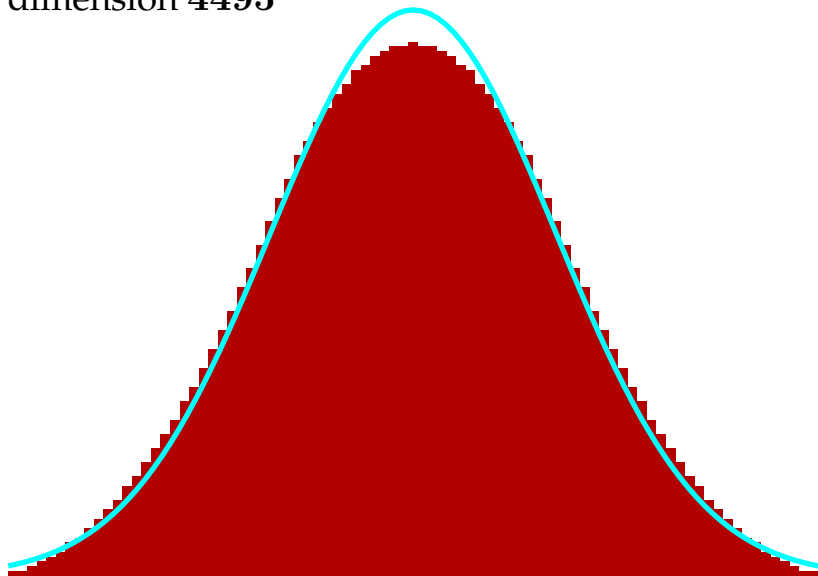dimension **3276**

weight distribution of $S^{26}(\sigma_3)$
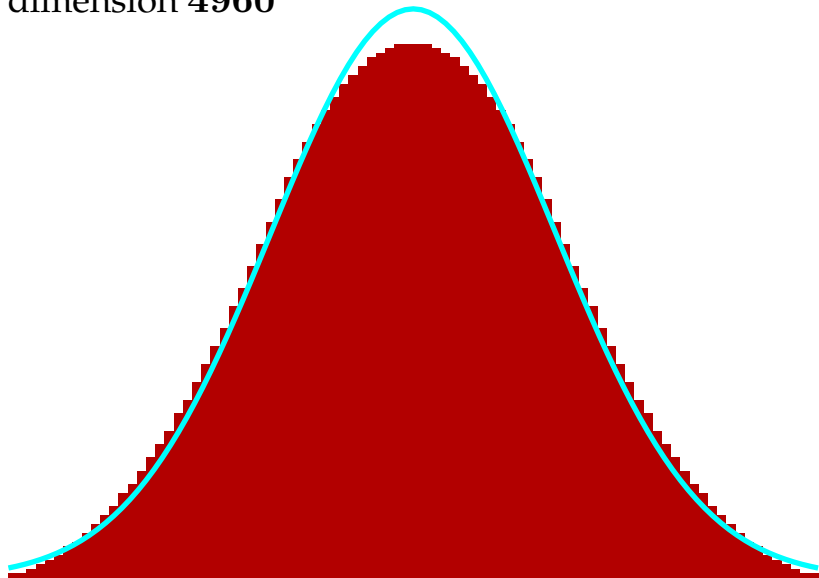dimension **3654**
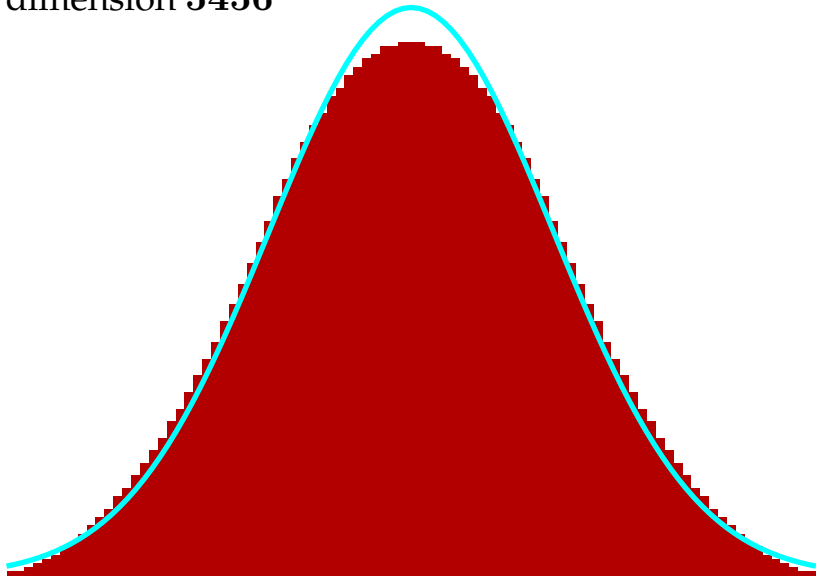
weight distribution of $S^{27}(\sigma_3)$
dimension **4060**

weight distribution of $S^{28}(\sigma_3)$
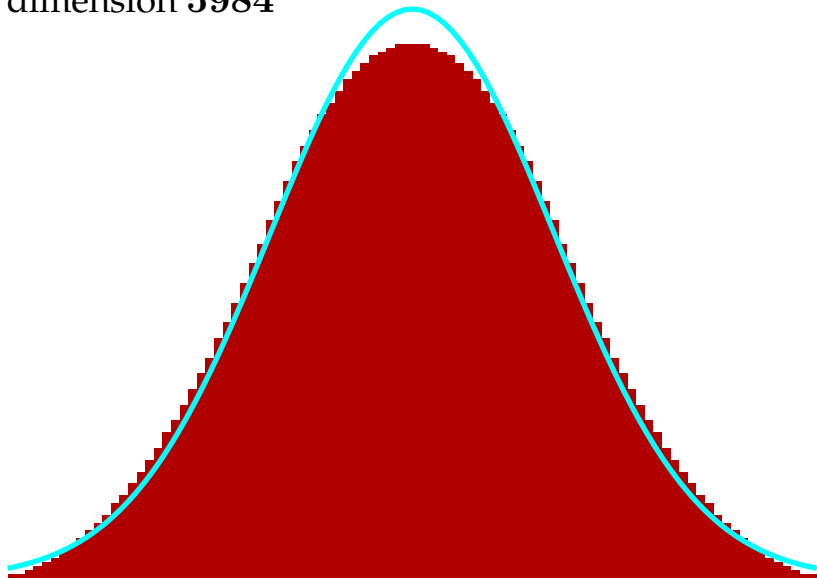dimension **4495**

weight distribution of $S^{29}(\sigma_3)$
dimension **4960**

weight distribution of $S^{30}(\sigma_3)$
dimension **5456**

weight distribution of $S^{31}(\sigma_3)$
dimension **5984**

weight distribution of $S^{32}(\sigma_3)$
dimension **6545**