[tex50] **Maxwell velocity distribution (Maxwell's derivation)**

In the original derivation of the velocity distribution $f(v_x, v_y, v_z)$ for a classical ideal gas, Maxwell used the following ingredients: (i) The Cartesian velocity components v_x, v_y, v_z (interpreted as stochastic variables) are statistically independent. (ii) The distribution $f(v_x, v_y, v_z)$ is spherical symmetric. (iii) The mean-square velocity is determined by the equipartition theorem. Determine $f(v_x, v_y, v_z)$ along these lines.