$$r \to \infty \qquad e^{ikz} \to \frac{1}{2ikr}\sum_{l=0}^{\infty}(2l+1)P_l(\cos\theta)\left[(-1)^{l+1}e^{-ikr}+e^{ikr}\right] \tag{1}$$

$$\int_0^\infty \frac{x^2}{e^x+1}dx = \frac{3}{2}\zeta(3) \tag{2}$$

$$\int_0^\infty \frac{x^2}{e^x-1}dx = 2\zeta(3) \tag{3}$$

$$\int_0^\infty \frac{x^3}{e^x+1}dx = \frac{7\pi^4}{120} \tag{4}$$

$$\int_0^\infty \frac{x^3}{e^x-1}dx = \frac{\pi^4}{15} \tag{5}$$

$$\int_0^\infty \frac{x^2}{e^{ax-b}+1}dx - \int_0^\infty \frac{x^2}{e^{ax+b}+1}dx = \frac{b^3}{3a^3}+\frac{\pi^2 b}{3a^3} \tag{6}$$

$$\int_0^\infty e^{-ax^2}dx = \frac{\sqrt{\pi}}{2\sqrt{a}} \tag{7}$$

(a szerint deriválva megkaphatók az $x^{2n}e^{-x^2}$ integrálok)

$\hbar = c = k = 1$
$1\,\mathrm{eV} = 11600\,\mathrm{K} = 5.07\times10^{6}\,\mathrm{m}^{-1} = 1.52\times10^{15}\,\mathrm{s}^{-1} = 1.78\times10^{-36}\,\mathrm{kg} = 1.6\times10^{-19}\,\mathrm{J}$
$m_{\mathrm{Pl}} = 1/\sqrt{G} = 1.22\times10^{19}\,\mathrm{GeV}$

$G = 6.67\times10^{-11}\,\mathrm{m}^3/(\mathrm{kg}*\mathrm{s}^2)$
$1\,\mathrm{AU} = 1.49\times10^{11}\,\mathrm{m}$, $1\,\mathrm{parsec} = 3.08\times10^{16}\,\mathrm{m}$, $M_\odot = 1.99\times10^{30}\,\mathrm{kg}$