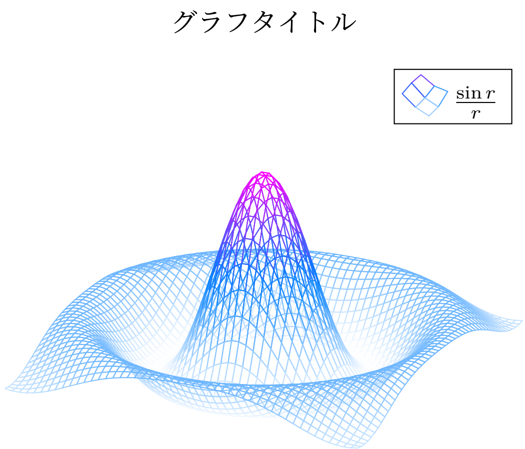
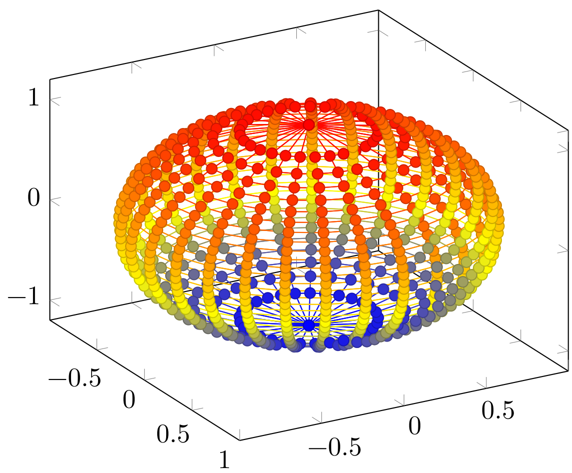
これはテストです。English and math: $\frac{\sin r}{r}$ ガウス関数の導出をします。

$$
\begin{aligned}
f(x) &= \frac{1}{\sqrt{2\pi}} e^{-\frac{x^2}{2}} \\
\int_{-\infty}^{\infty} f(x)\,dx &= \int_{-\infty}^{\infty} \frac{1}{\sqrt{2\pi}} e^{-\frac{x^2}{2}}\,dx \\
&= \frac{1}{\sqrt{2\pi}} \int_{-\infty}^{\infty} e^{-\frac{x^2}{2}}\,dx \\
&= \frac{1}{\sqrt{2\pi}} \cdot \sqrt{2\pi} \\
&= 1
\end{aligned}
$$

複素数の積分を考えます ss

$$
\begin{aligned}
\int_{-\infty}^{\infty} e^{ix}\,dx &= \lim_{R\to\infty} \int_{-R}^{R} e^{ix}\,dx \\
&= \lim_{R\to\infty} \left[\frac{e^{ix}}{i}\right]_{-R}^{R} \\
&= \lim_{R\to\infty} \left(\frac{e^{iR}}{i} - \frac{e^{-iR}}{i}\right) \\
&= \lim_{R\to\infty} \left(\frac{\cos R + i\sin R}{i} - \frac{\cos R - i\sin R}{i}\right)
\end{aligned}
$$

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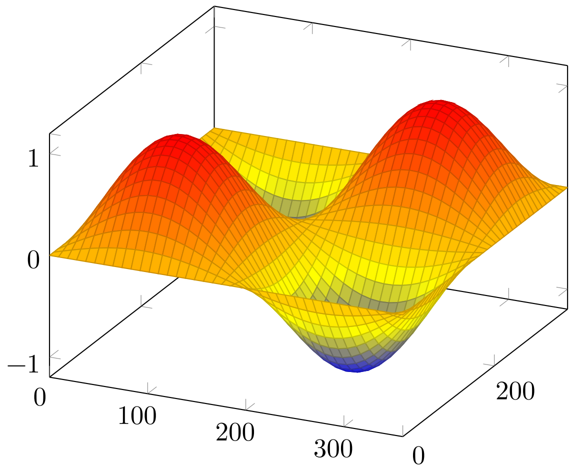

1
0
−1
0
100
200
300
0
200