$$\sum_{n=1}^{\infty} \underbrace{\frac{2^n}{n!}}_{a_n > 0}$$

$$\lim_{n\to\infty} \frac{a_{n+1}}{a_n} = \lim_{n\to\infty} \frac{\frac{2^{n+1}}{(n+1)!}}{\frac{2^n}{n!}} =$$

$$\lim_{n\to\infty} \frac{n!}{(n+1)!} \cdot \frac{2^{n+1}}{2^n} = \lim_{n\to\infty} \frac{2}{n+1} = 0 < 1$$

Závěr z d'Al podíl. krit.

$\sum a_n$ K

$\sum \frac{2^n}{n!}$

$a_n \geq 0$

Cauchy $\sum$ krit.

$\lim\limits_{n\to\infty} \sqrt[n]{a_n} = \lim\limits_{n\to\infty} \sqrt[n]{\frac{2^n}{n!}} = \lim \frac{2}{\sqrt[n]{n!}}$

∞

$= 0 < 1$

~~závěr~~ : $\sum \frac{2^n}{n!}$ K

$\sum \frac{1}{n^2}$