Exercice 7.

$$u_n = \frac{\ln n}{n^2}$$

$\forall n \geq 1 \quad u_n \geq 0$

$u_n = o\left(\frac{1}{n^{3/2}}\right)$ car $\lim_{n\to+\infty} \frac{\ln n}{\sqrt{n}} = 0$.

$\sum_{n\geq 1} \frac{1}{n^{3/2}}$ converge (règle de Riemann $\frac{3}{2} > 1$)

Donc $\sum_{n\geq 1} u_n$ converge.