

SVILUPPI DI TAYLOR FUNZ. ELEM.

$$\bullet e^x = \sum_{K=0}^{\infty} \frac{1}{K!} x^K + o(x^m)$$

$$\bullet \sinh x = \sum_{K=0}^{\infty} \frac{(-1)^K x^{2K+1}}{(2K+1)!} + o(x^{2K+2})$$

$$\bullet \cosh x = \sum_{K=0}^{\infty} \frac{(-1)^K x^{2K}}{(2K)!} + o(x^{2K+1})$$

$$\bullet \ln(1+x) = \sum_{K=1}^{\infty} \frac{(-1)^{K-1} x^K}{K} + o(x^m)$$

$$\bullet e^x = 1 + x + \frac{x^2}{2} + \frac{x^3}{6} + \dots$$

$$\bullet \sin x = x - \frac{x^3}{6} + \frac{x^5}{120} - \dots$$

$$\bullet \cos x = 1 - \frac{x^2}{2} + \frac{x^4}{24} - \dots$$

$$\bullet \ln(1+x) = x - \frac{x^2}{2} + \frac{x^3}{3} - \frac{x^4}{4} + \dots$$

$$\bullet \arctan x = x - \frac{x^3}{3} + \frac{x^5}{5} - \dots$$

$$\ln(\cos x) =$$

$$= -\frac{x^2}{2} + o(x^2)$$

$$(1+x)^d = 1 + \frac{dx}{1!} + \frac{d(d-1)x^2}{2!} + \dots$$