Equazione : 4y'' + 4y' + y = 0

solution = DSolve[4 y ' '[t] + 4 y '[t] + y[t] == 0, y[t], t]
$$\left\{ \left\{ y[t] \rightarrow e^{-t/2} c_1 + e^{-t/2} t c_2 \right\} \right\}$$

$$f[t_] = y[t] /. \text{ solution[1]}$$

 $\begin{aligned} &\text{F[t_] = y[t]/. Solution[[t]]} \\ &\text{F[t_] = Table[f[t]/. } \{c_1 \rightarrow j, c_2 \rightarrow r\}, \{j, -5, 5\}, \{r, -5, 5\}] \\ &\text{Plot[F[t], } \{t, -3, 3\}, \text{ AxesLabel } \rightarrow \{t, y\}, \\ &\text{PlotRange } \rightarrow \{-10, 10\}, \text{ PlotStyle } \rightarrow \text{ColorData[13, "ColorList"]]} \end{aligned}$

Out[110]=

