ELEKTROMAGNETIKA - 1
Integrali

$$\int \frac{dx}{\sin[x]} = \ln\left|tg\left[\frac{x}{2}\right]\right| \qquad \int \frac{dx}{\cos(x)} = \ln\left|tg\left[\frac{x}{2}+\frac{\pi}{4}\right]\right|$$

$$\int \frac{dx}{1-x^2} = \frac{1}{2}\ln\left|\frac{1+x}{1-x}\right| \qquad \int \frac{dx}{\sqrt{x^2 \pm 1}} = \ln\left|x+\sqrt{x^2 \pm 1}\right|$$

$$\int \frac{dx}{a^2+x^2} = \frac{1}{2a}\ln\left|\frac{a+x}{a-x}\right| \qquad \int \frac{dx}{x^2+a^2} = \frac{1}{a}arctg\left[\frac{x}{a}\right]$$

$$\int \frac{dx}{x^2-a^2} = \frac{1}{2a}arctg\left[\frac{x-a}{x+a}\right] \qquad \int \frac{dx}{\sqrt{x^2 \pm a^2}} = \ln\left|x+\sqrt{x^2 \pm a^2}\right|$$

$$\int \frac{dx}{1+x^2} = arctg[x] \qquad \int \frac{dx}{\sqrt{1-x^2}} = \arcsin[x]$$

$$\int \frac{dx}{\sqrt{a^2-x^2}} = \arcsin\left[\frac{x}{a}\right] \qquad \int \sqrt{a^2-x^2}\,dx = \frac{x}{2}\sqrt{a^2-x^2} + \frac{a^2}{2}\arcsin\left[\frac{x}{a}\right]$$

$$\int \sin^2[x]dx = \frac{x}{2} - \frac{1}{4}\sin[2x] \qquad \int \cos^2[\mathrm{x}]dx = \frac{x}{2} + \frac{1}{4}\sin[2x]$$

$$\int \sqrt{x^2+A}\,dx = \frac{x}{2}\sqrt{x^2+A} + \frac{A}{2}\left|x+\sqrt{x^2+A}\right|$$

Smjene:

$$tg(\frac{x}{2}) = t \qquad \sin(x) = \frac{2t}{1+t^2} \qquad \cos(x) = \frac{1-t^2}{1+t^2} \qquad dx = \frac{2dt}{1+t^2}$$