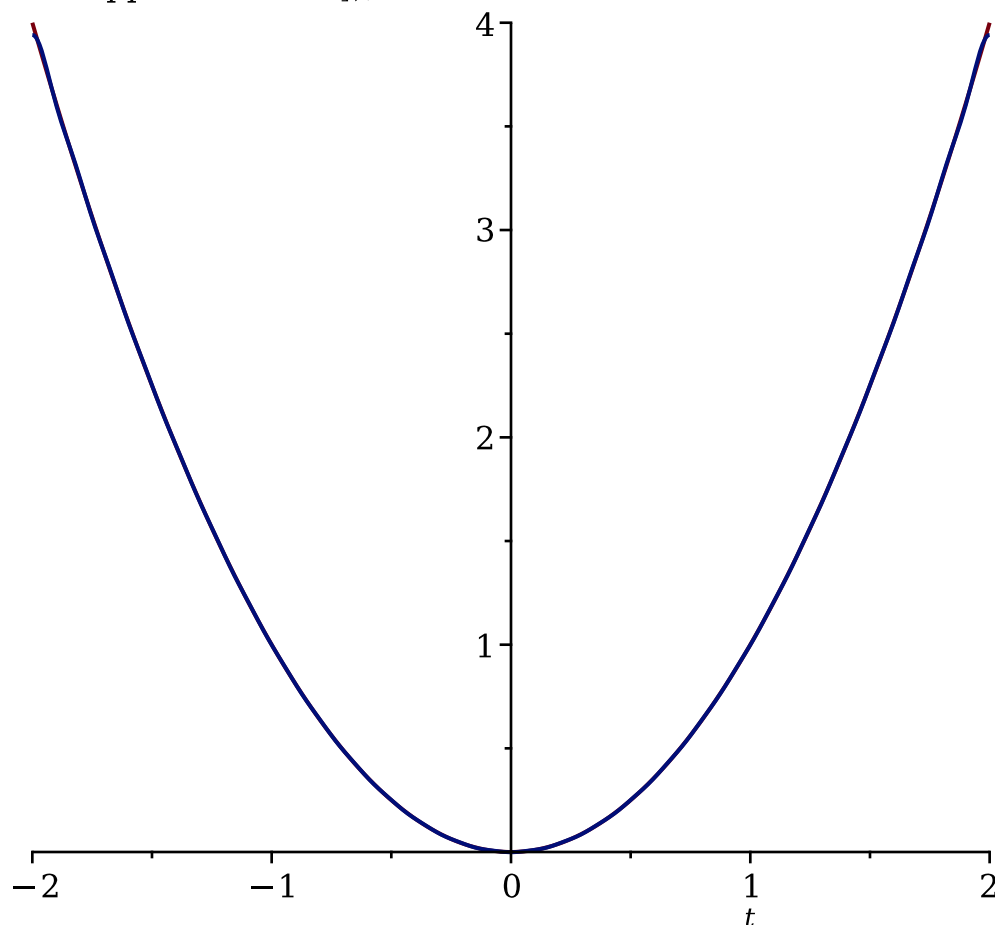


```

> restart: with(plots):
> f := t -> t^2:
> T := 4:
> a_0 := 2/T * int(f(t), t = -T/2 .. T/2):
> a_n := n -> 2/T * int(f(t) * cos(2*Pi*n*t/T), t = -T/2 .. T/2):
> fourier := t -> 1/2*a_0 + add(a_n(n)*cos(2*Pi*n*t/T), n = 1 .. 27):
Warning. (in fourier) `n` is implicitly declared local
> plot([f(t), fourier(t)], t = -2 .. 2, legend = ["Original Function",
    "Fourier Approximation"]);

```



— Original Function — Fourier Approximation

```

> # In de grenzen horen we het fenomeen van gibbs mee te maken
    (divergentie)

```