

Electric field of a dipole

```
> restart;
```

```
> with(plots) :
```

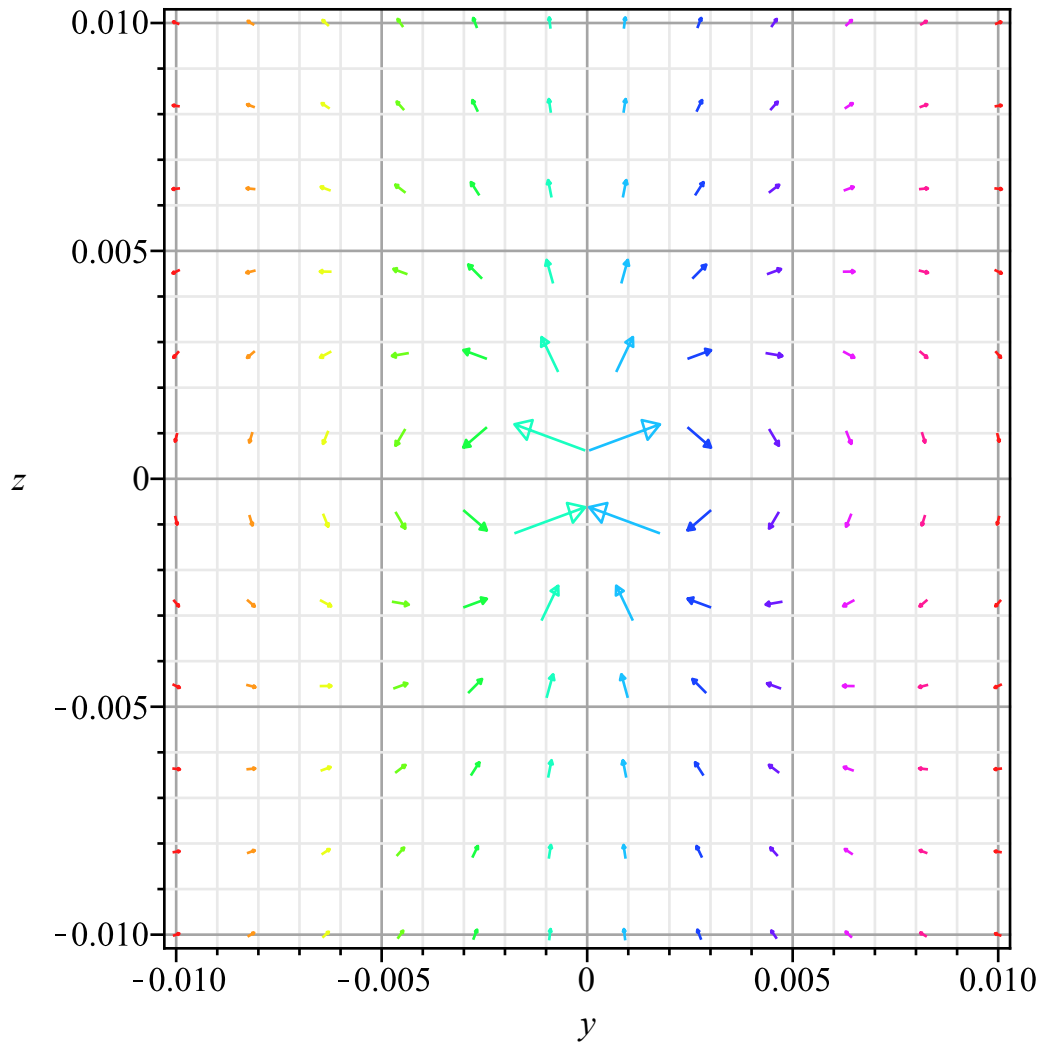
```
> Ey :=  $\frac{3 \cdot y \cdot z}{(y^2 + z^2)^{\frac{5}{2}}}$ ; Ez :=  $\frac{(2 \cdot z^2 - y^2)}{(y^2 + z^2)^{\frac{5}{2}}}$ ;
```

$$Ey := \frac{3 y z}{(y^2 + z^2)^{5/2}}$$

$$Ez := \frac{2 z^2 - y^2}{(y^2 + z^2)^{5/2}}$$

(1)

```
> fieldplot( [Ey, Ez], y=-0.01..0.01, z=-0.01..0.01, fieldstrength=log, grid=[12, 12], arrows=SLIM, color=y);
```



```
>
```

```
>
```