TPSS

The original Tpss code is copyrighted, I belive that suche things hi

```
    res:=false;
```

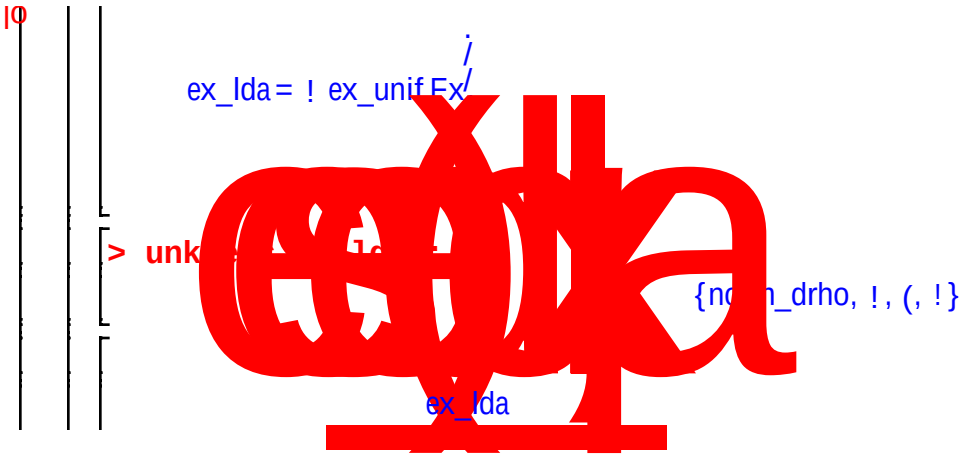
```
    if not dep then i:=i+1; end i
```

exhange energy (LDA)

$$eqx9 := Fx = 1 + * - \frac{*}{1 + \frac{x}{*}}$$

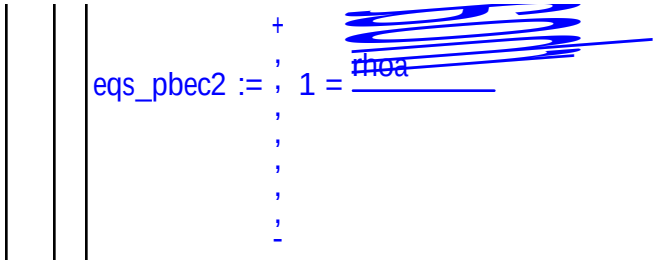
$$eqk1 := * = 0.804$$

eqk2


ex_lda = ! ex_unif Ex
{no n_drho, ! , (, ! }
ex_lda

$$eqc6 := C_chi_eps = \frac{C_chi}{\left(1 + \frac{1}{_}\right)^2 \left(\frac{1}{(1+1)^{(4/3)}} + \frac{1}{(1-\ )^{(4/3)}}\right)^4}$$

```
eqpbe9:=gamma_var=(1-ln(2))/Pi^2;evalf(rhs(eqpbe9));
```


eqs_pbec2 :=
1 =
rhoa

```
ilon_cGGA_1_0,rhob=0,norm_drho=norm_drhoa,
  norm_drhob=        o     _ b
```

e_c_u_1, alpha_c, f_ii_0, f, epsilon_c_unif, 3, gamma_var, 2, k_f, k_s, t, A, H, epsil GGA, d, norm_dchi, eps, C_chi, tau_w, C_chi_eps, ma, mb, epsilon_cRevPKZ

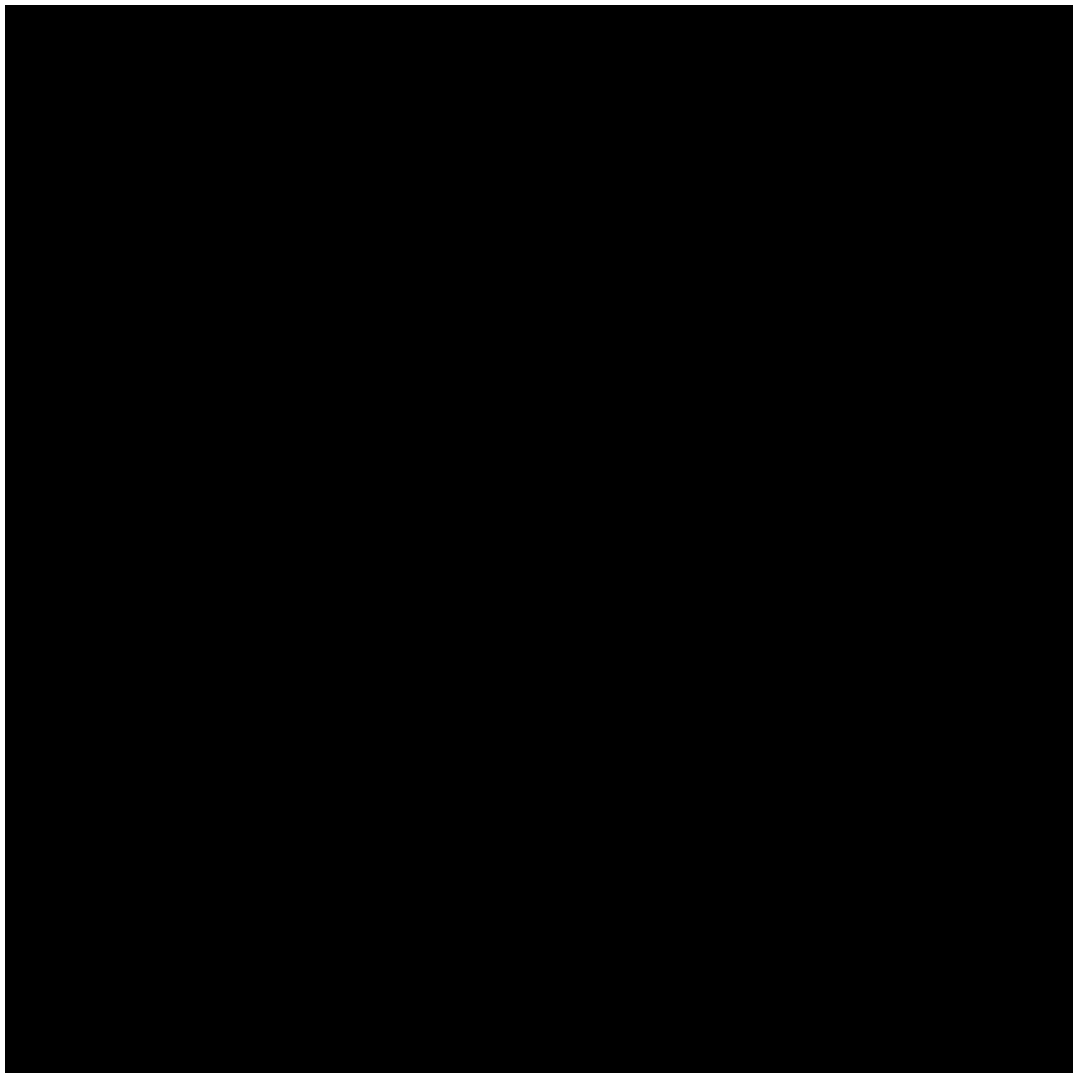
epsilon_cGGAnorm_drho)]

```
| |"H_s1rho", "ep
```

```
      t149 = 0.1D1 / t148
      t151
```

```
      t228 = t223 ** 2
      t230 = 0.1D1 + t225 +  227 * t228
      t231 = 0.1
```

```
      t285 = 0.1D1 / t284
      t288 = 0.10D2 / 0.81D2 + 0.159096D1 * t282 * t285
```

```
      cg92 = t67 * t69 * t7 / 0.  1
      cg93 = t8
```

$$\text{tildeq_b} = \frac{9\,(\,) - 1)}{20}$$