

```

In [2]:  $\mathcal{G}(x,t) = \exp(2t * x - t^2)$   # generating function;  $\mathcal{G}$  is typed as \scrG<TAB>

xn = set_variables("x", numvars=1, order=10)

x = xn[1]

t = Taylor1([zero(x), one(x)], 10)  # Taylor1{TaylorN{Float64}}

gf =  $\mathcal{G}(x, t)$   # Taylor1 expansion of  $\mathcal{G}$ 

HH(n::Int) = derivative(n, gf)  # n-th derivative of `gf`

HH(6)

```

```

Out[2]:  - 120.0 + 720.0  $x_1^2$  - 480.0  $x_1^4$  + 63.99999999999999  $x_1^6$ 

```