```
Ak = {9.982012300 * 10^2,
-1.929769495 * 10^2,
3.891238958 * 10^2,
-1.668103923 * 10^3,
1.352215441 * 10^4,
-8.829278388 * 10^4,
3.062874042 * 10^5,
-6.138381234 * 10^5,
7.470172998 * 10^5,
-5.478461354 * 10^5,
2.234460334 * 10^5,
-3.903285426 * 10^4}
```

In[59]:=
```
Bk = {-2.0618513 * 10^-1,
-5.2682542 * 10^-3,
3.6130013 * 10^-5,
-3.8957702 * 10^-7,
7.1693540 * 10^-9,
-9.9739231 * 10^-11}
```

In[60]:=
```
C1k = {1.693443461530087 * 10^-1,
-1.046914743455169 * 10^1,
7.196353469546523 * 10^1,
-7.047478054272792 * 10^2,
3.924090430035045 * 10^3,
-1.210164659068747 * 10^4,
2.248646550400788 * 10^4,
-2.605562982188164 * 10^4,
1.852373922069467 * 10^4,
-7.420201433430137 * 10^3,
1.285617841998974 * 10^3}
```

In[61]:=
```
C2k = {-1.193013005057010 * 10^-2,
2.517399633803461 * 10^-1,
-2.170575700536993,
1.353034988843029 * 10^1,
-5.029988758547014 * 10^1,
1.096355666577570 * 10^2,
-1.422753946421155 * 10^2,
1.080435942856230 * 10^2,
-4.414153236817392 * 10^1,
7.442971530188783}
```

In[62]:=
```
C3k = {-6.802995733503803 * 10^-4,
 1.876837790289664 * 10^-2,
 -2.002561813734156 * 10^-1,
 1.022992966719220,
 -2.895696483903638,
 4.810060584300675,
 -4.672147440794683,
 2.458043105903461,
 -5.411227621436812 * 10^-1}
```

In[63]:=
```
C4k = {4.075376675622027 * 10^-6,
 -8.763058573471110 * 10^-6,
 6.515031360099368 * 10^-6,
 -1.515784836987210 * 10^-6}
```

In[64]:=
```
C5k = {-2.788074354782409 * 10^-8,
 1.345612883493354 * 10^-8}
```

In[66]:=
$$\text{density}[p\_, t\_] := \text{Ak}[[1]] + \sum_{k=2}^{12} \text{Ak}[[k]]\, p^{(k-1)} + \sum_{k=1}^{6} \text{Bk}[[k]]\, (t-20)^{k} + \sum_{k=1}^{11} \text{C1k}[[k]]\, p^{k}\, (t-20) + \sum_{k=1}^{10} \text{C2k}[[k]]\, p^{k}\, (t-20)^{2} + \sum_{k=1}^{9} \text{C3k}[[k]]\, p^{k}\, (t-20)^{3} + \sum_{k=1}^{4} \text{C4k}[[k]]\, p^{k}\, (t-20)^{4} + \sum_{k=1}^{2} \text{C5k}[[k]]\, p^{k}\, (t-20)^{5}$$

In[74]:=
```
density[0.2, -10]
```

Out[74]= 977.638