

```

In[61]:= distr00b = {{1, 90.0}, {3, 85.3}, {5, 83.5}, {7, 82.3}, {9, 82.2}, {11, 81.0},
    {13, 81.3}, {15, 78.9}, {17, 78.1}, {19, 77.1}, {21, 74.6}, {23, 72.9},
    {25, 70.6}, {27, 70.5}, {29, 70.9}, {31, 69.4}, {33, 63.8}, {35, 65.7},
    {37, 63.0}, {39, 61.1}, {41, 59.3}, {43, 58}, {45, 60.2}, {47, 55.6}, {49, 50.2},
    {51, 48.2}, {53, 45}, {55, 53.6}, {57, 42.0}, {59, 41.5}, {61, 42.3}, {63, 41.3},
    {65, 43.2}, {67, 40.5}, {69, 38.5}, {71, 37.4}, {73, 39.8}, {74, 42.3}};

Pt1 = C1 Exp[- $\frac{t}{T2}$ ];
fit1 = NonlinearModelFit[distr00b, Pt1, {C1, T2}, t]

Out[63]= FittedModel[ $93.0048 e^{-0.0116802 t}$ ]

In[78]:= Error1 =
     $\frac{1}{38}$  Sum[ $93.00481931102193 \cdot \text{Exp}[-0.01168018237400154 \cdot \text{distr00b}[[i]][1]] - \text{distr00b}[[i]][2]$ ,
    {i, 1, 38}]

Out[78]= 0.0496916

```

```
In[83]:= Pt2 = C2 Exp[-(t/T2b)^2];
```

```
fit2 = NonlinearModelFit[distr00b, Pt2, {C2, T2b}, t]
```

```
Out[84]= FittedModel[81.8011 e-0.000168592 t2]
```

```
In[94]:= Error2 = 1/38 Sum[81.80108418850922` * Exp[-0.0001685923200164316` * (distr00b[[i]][[1]])^2] -  
distr00b[[i]][[2]], {i, 1, 38}]
```

```
Out[94]= -0.0848458
```

```
In[88]:= fit3 = LinearModelFit[distr00b, t, t]
```

```
Out[88]= FittedModel[ 89.2806 - 0.728734 t ]
```

```
In[93]:= Error3 =  $\frac{1}{38}$ 
```

```
Sum[89.28062790822062` - 0.7287344840695658` * distr00b[[i]][[1]] - distr00b[[i]][[2]], {i, 1, 38}]
```

```
Out[93]=  $7.66638 \times 10^{-15}$ 
```

```
In[89]:= Show[ListPlot[distr00b], Plot[{fit1[t], fit2[t], fit3[t]}, {t, 0, 80}], Frame -> True]
```

