

Fit  $P(t) = C \exp\left(-\frac{t}{T_2}\right)$

In[8]:=

```
distr00 = {{1, 90.0}, {5, 83.5}, {10, 82.1}, {15, 78.9},
           {20, 74.6}, {25, 70.6}, {30, 68.4}, {35, 65.7}, {40, 61.0}, {45, 60.2},
           {50, 52.9}, {55, 53.6}, {60, 49.4}, {65, 43.2}, {70, 43.7}, {74, 42.3}};

Pt1 = C1 Exp[- $\frac{t}{T_2}$ ];
fit1 = FindFit[distr00, Pt1, {C1, T2}, t]
```

Out[10]=

```
{C1 → 90.9493, T2 → 98.2161}
```

In[11]:=

```
Pf1 = Function[{t}, Evaluate[Pt1 /. fit1]]
```

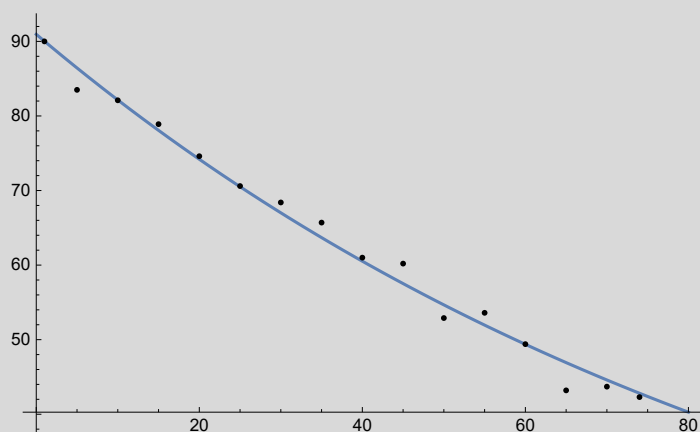
Out[11]=

```
Function[{t}, 90.9493  $e^{-0.0101816 t}$ ]
```

In[7]:=

```
Plot[Pf1[t], {t, 0, 80}, Epilog → Map[Point, distr00]]
```

Out[7]=



Fit  $P(t) = C \exp\left[-\left(\frac{t}{T_2}\right)^2\right]$

In[12]:=

```
Pt2 = C2 Exp[- $\left(\frac{t}{T_2b}\right)^2$ ];
fit2 = FindFit[distr00, Pt2, {C2, T2b}, t]
```

Out[13]=

```
{C2 → 81.4169, T2b → 83.6089}
```

In[14]:=

```
Pf2 = Function[{t}, Evaluate[Pt2 /. fit2]]
```

Out[14]=

```
Function[{t}, 81.4169  $e^{-0.000143052 t^2}$ ]
```

In[15]:=

```
Plot[Pf2[t], {t, 0, 80}, Epilog -> Map[Point, distr00]]
```

Out[15]=

