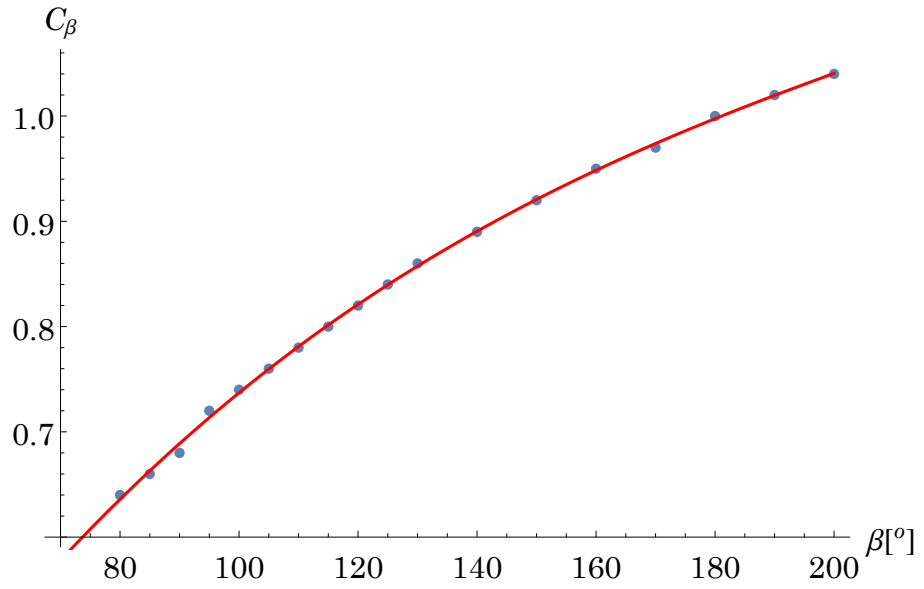
In[1]:=
```
(*Faktor obvojnog ugla trapeznih i rebrastih remena Cβ*)
(*Tabela 10.12 – str. 385 – Milcic.*)
SetOptions[ListPlot, BaseStyle → {FontFamily → "Century Schoolbook", FontSize → 16}];
(*Definisanje uredjene liste podataka*)
Lista = {{200, 1.04}, {190, 1.02}, {180, 1}, {170, 0.97}, {160, 0.95}, {150, 0.92}, {140, 0.89}, {130, 0.86}, {125, 0.84},
   {120, 0.82}, {115, 0.8}, {110, 0.78}, {105, 0.76}, {100, 0.74}, {95, 0.72}, {90, 0.68}, {85, 0.66}, {80, 0.64}};

Grid[{{β, 200, 190, 180, 170, 160, 150, 140, 130, 125, 120, 115, 110, 105, 100, 95, 90, 85, 80},
  {Cβ, 1.04, 1.02, 1, 0.97, 0.95, 0.92, 0.89, 0.86, 0.84, 0.82, 0.8, 0.78, 0.76, 0.74, 0.72, 0.68, 0.66, 0.64}}, Frame → All]

(*Fitovanje*)
Fitovanje = Fit[Lista, {1, x, x^2, x^3}, x];

(*Stampanje funkcije*)
Grafik1 = ListPlot[Lista, AxesOrigin → {70, 0.6}, AxesLabel → {"β[°]", "Cβ"}];
Grafik2 = Plot[Fitovanje, {x, 70, 200}, PlotStyle → Red];
Show[Grafik1, Grafik2]
Print["Interpolacioni polinom ima sledeci oblik: y=", Fitovanje]
F[x_] = Fitovanje;
```

Out[3]=

β	200	190	180	170	160	150	140	130	125	120	115	110	105	100	95	90	85	80
C_β	1.04	1.02	1	0.97	0.95	0.92	0.89	0.86	0.84	0.82	0.8	0.78	0.76	0.74	0.72	0.68	0.66	0.64

Out[7]=



Interpolacioni polinom ima sledeci oblik: $y=0.00281601+0.0106648\,x-0.0000390555\,x^2+5.83701\times10^{-8}\,x^3$

```
(*Procentualna greska interpolacionog polinoma*)
```

$$\text{Greska} = \frac{\text{Abs}[F[90]-0.68]}{0.68} * 100$$

```
1.30094
```

```
F[167.288]
```

```
0.967188
```