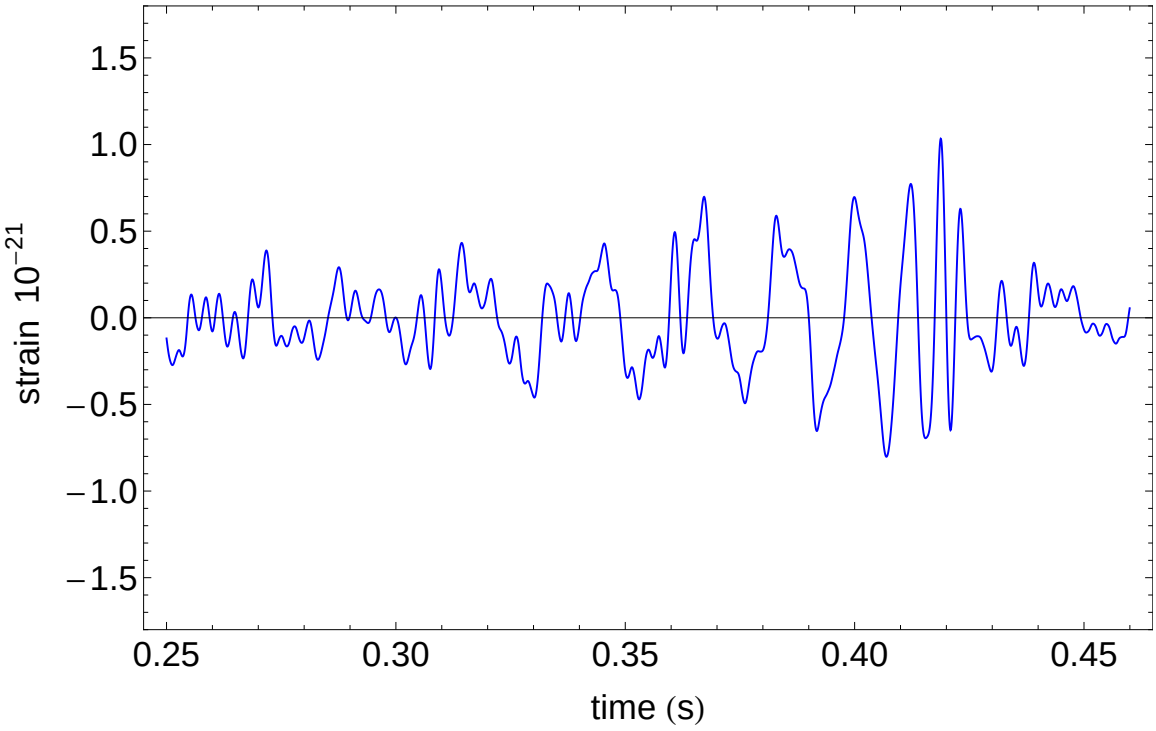
In[1499]:=

```
H1 = ListPlot[Import["D:\\GW150914.txt", "Table"],
  ImageSize → 600, Frame → True, Joined → True,
  PlotRange → {{0.245, 0.465}, {-1.8, 1.8}}, BaseStyle → {FontFamily → "Arial", 18},
  FrameLabel → {"time (s)", (Subsuperscript["10", "", "-21"]) " strain "},
  PlotStyle → {Blue, Thickness[Medium]}]
```

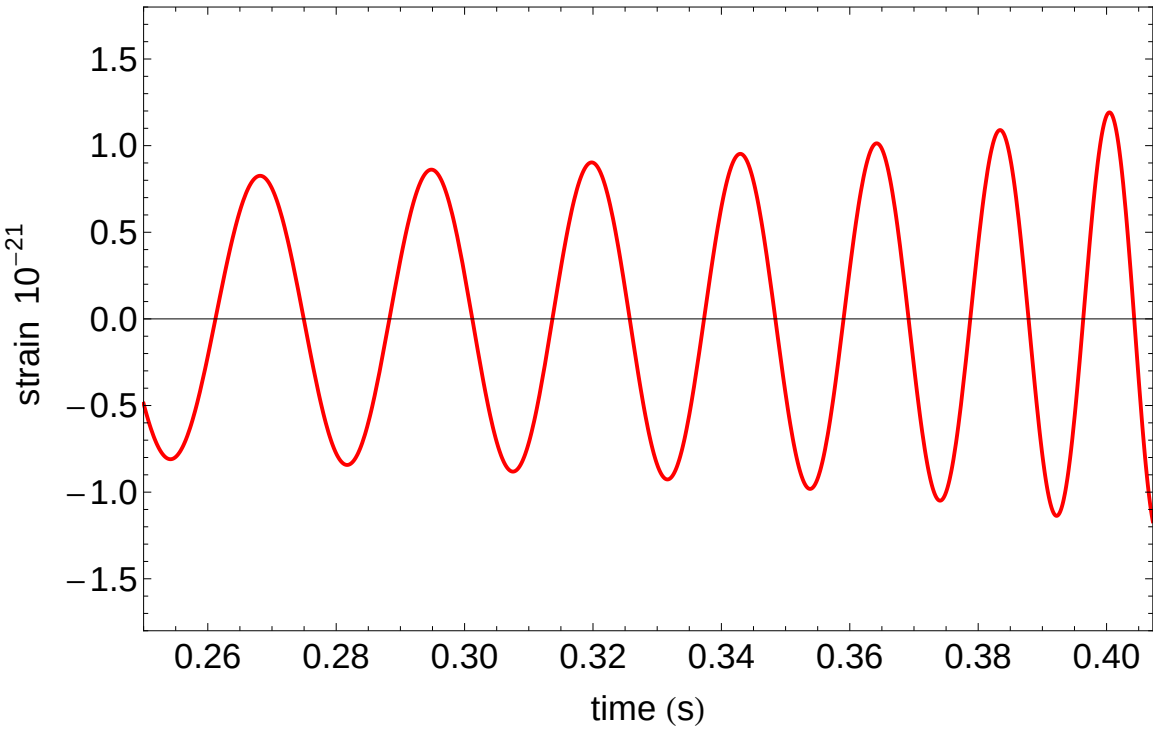
Out[1499]=



In[1500]:=

```
ClearAll[f0, m1, m2, mchirp, M, r, d];
mchirp[m1_, m2_] = (m1 m2)^(3 / 5) (m1 + m2)^(-1 / 5);
M = mchirp[m1, m2] * 4.92549095 * 10^(-6);
d = r * 1.0292712503 * 10^8;
tmerg[M_, f0_] = 5 (256 (N[π] f0)^(8 / 3) M^(5 / 3))^(-1);
F[M_, f0_, t_] =
 (M (f0)^9)^(1 / 8) ((M f0)^(1 / 3) - 256 f0^3 M^2 N[π]^(8 / 3) ((t - 0.25) / 5))^(-3 / 8);
Angle[M_, f0_, t_] = -2 ((256 (N[π] M f0)^(8 / 3))^(-1) - ((t - 0.25) / (5 M)))^(5 / 8);
Amplitude[M_, f0_, d_, t_] = 4 M^(5 / 3) N[π]^(2/3) (F[M, f0, t])^(2 / 3) d^(-1);
m1 = 36;
m2 = 29;
f0 = 35;
r = 410 * 10^6;
H2 = Plot[{Amplitude[M, f0, d, t] * Cos[Angle[M, f0, t]] * 10^21} , {t, 0.25, 0.4072},
  PlotRange → {{0.25, 0.4072}, {-1.8, 1.8}}, PlotStyle → {Red, Thickness[Large]},
  Frame → True, ImageSize → 600, BaseStyle → {FontFamily → "Arial", 18},
  FrameLabel → {"time (s)", (Subsuperscript["10", "", "-21"]) " strain "}]
```

Out[1511]=



In[1528]:=

```
Needs["PlotLegends`"]
ShowLegend[Show[H1, H2],
 {{{Graphics[{Blue, Thickness[Large], Line[{{0, 0}, {1, 0}}]}], Style["L1 Observed",
     Bold, 15]}, {Graphics[{Red, Thickness[Large], Line[{{0, 0}, {1, 0}}]}],
   Style["Newtonian chirp", Bold, 15]}}, LegendSize → {0.85, 0.3},
  LegendPosition → {1, 0.3}, LegendShadow → None}]
```

Out[1529]=