```
> with(DEtools):
> with(plots):
> f(q1,p1,q2) := -sqrt(-4·q2^2+3·q1^2·q2-q1^2-4·p1^2+0.07)/2:
> g(q1,p1,q2) := sqrt(-4·q2^2+3·q1^2·q2-q1^2-4·p1^2+0.07)/2:
> H := (p1^2+p2^2)/2+(q1^2+q2^2)/2-(3/4)·q1^2·(1+q2)/2:
> for j from 1 to 10 do F[j] := poincare(H, t=0..1000, {[0, j/100, g(0.15, j/100, 0.001), 0.15, 0.001]}, stepsize=0.01) od:
```

$H = .87500000e\text{-}2$, *Initial conditions:*, $t = 0$, $p1 = \frac{1}{100}$, $p2 = 0.1085857956$, $q1 = 0.15$, $q2 = 0.001$

Number of points found crossing the (p1,q1) plane: 299
Maximum H deviation : .3000000000e-7 %

Time consumed: 5 seconds

$H = .87500000e\text{-}2$, *Initial conditions:*, $t = 0$, $p1 = \frac{1}{50}$, $p2 = 0.1071954990$, $q1 = 0.15$, $q2 = 0.001$

Number of points found crossing the (p1,q1) plane: 300
Maximum H deviation : .3000000000e-7 %

Time consumed: 5 seconds

$H = .87500000e\text{-}2$, *Initial conditions:*, $t = 0$, $p1 = \frac{3}{100}$, $p2 = 0.1048373740$, $q1 = 0.15$, $q2 = 0.001$

Number of points found crossing the (p1,q1) plane: 299
Maximum H deviation : .1200000000e-6 %

Time consumed: 5 seconds

$H = .87500000e\text{-}2$, *Initial conditions:*, $t = 0$, $p1 = \frac{1}{25}$, $p2 = 0.1014439500$, $q1 = 0.15$, $q2 = 0.001$

Number of points found crossing the (p1,q1) plane: 298
Maximum H deviation : .9000000000e-7 %

Time consumed: 5 seconds

$H = .87500000e\text{-}2$, *Initial conditions:*, $t = 0$, $p1 = \frac{1}{20}$, $p2 = 0.09690652715$, $q1 = 0.15$, $q2 = 0.001$

Number of points found crossing the (p1,q1) plane: 297
Maximum H deviation : .2000000000e-7 %

Time consumed: 5 seconds

$H = .87500000e\text{-}2$, *Initial conditions:*, $t = 0$, $p1 = \frac{3}{50}$, $p2 = 0.09105424210$, $q1 = 0.15$, $q2 = 0.001$

Number of points found crossing the (p1,q1) plane: 296
Maximum H deviation : .2000000000e-7 %

Time consumed: 5 seconds

$H = .87500000e\text{-}2$, *Initial conditions:*, $t = 0$, $p1 = \frac{7}{100}$, $p2 = 0.08361145255$, $q1 = 0.15$, $q2 = 0.001$

Number of points found crossing the (p1,q1) plane: 295
Maximum H deviation : .4000000000e-7 %

Time consumed: 5 seconds

$H = .87500000e\text{-}2$, *Initial conditions:*, $t = 0$, $p1 = \frac{2}{25}$, $p2 = 0.07410043860$, $q1 = 0.15$, $q2 = 0.001$

Number of points found crossing the (p1,q1) plane: 294
Maximum H deviation : .2000000000e-7 %

Time consumed: 5 seconds

$H = .87500000e\text{-}2$, *Initial conditions:*, $t = 0$, $p1 = \frac{9}{100}$, $p2 = 0.06157008200$, $q1 = 0.15$, $q2 = 0.001$

Number of points found crossing the (p1,q1) plane: 294
Maximum H deviation : .4000000000e-7 %

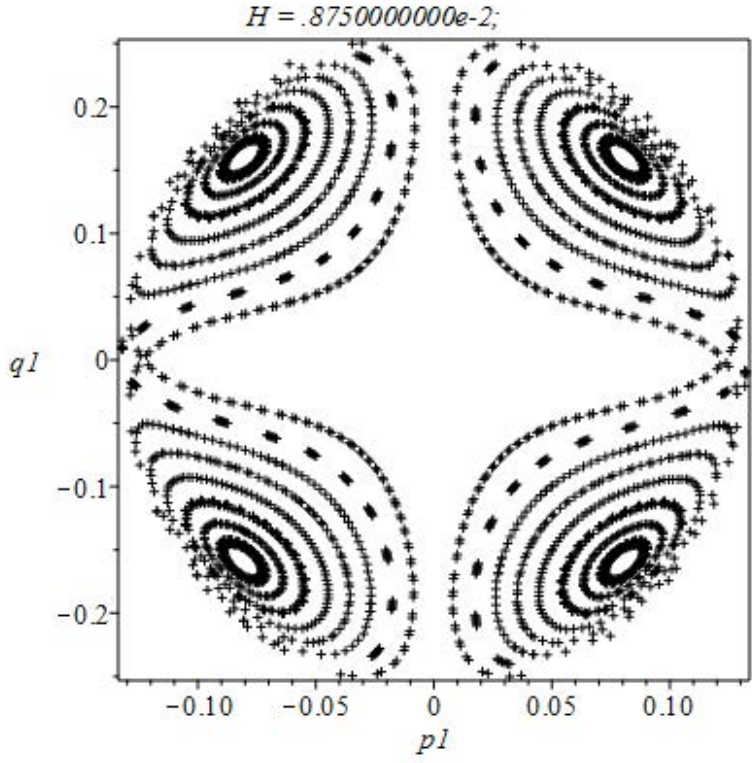
Time consumed: 5 seconds

$H = .87500000e\text{-}2$, *Initial conditions:*, $t = 0$, $p1 = \frac{1}{10}$, $p2 = 0.04348419253$, $q1 = 0.15$, $q2 = 0.001$

Number of points found crossing the (p1,q1) plane: 296
Maximum H deviation : .3000000000e-7 %

Time consumed: 5 seconds **(1)**

```
> display({F[1], F[2], F[3], F[4], F[5], F[6], F[7], F[8], F[9], F[10]})
```



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