

A. Appendix

A.1 First oscillator

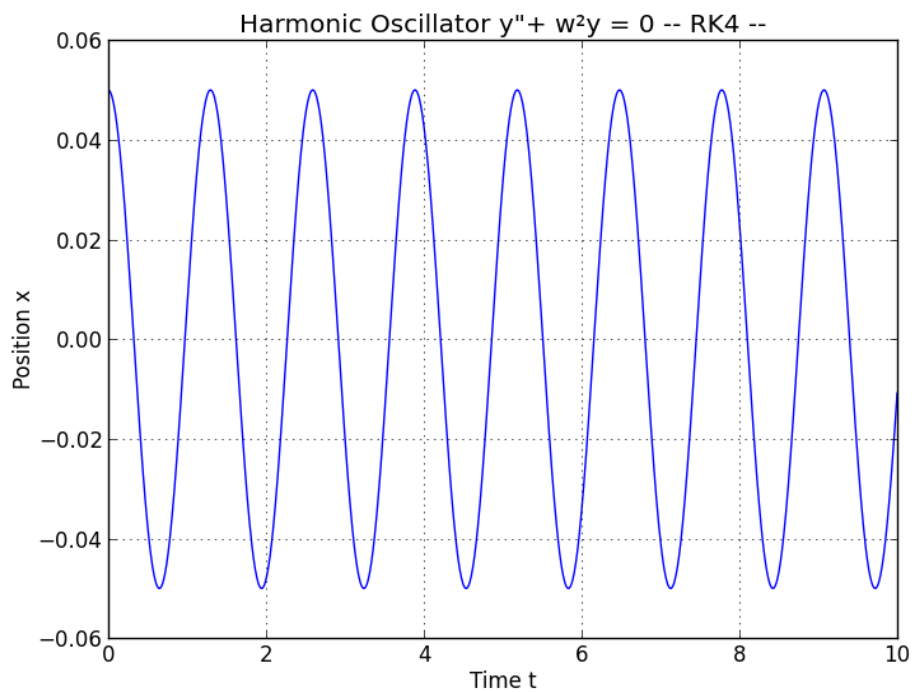


Fig A.1.1- Harmonic solution

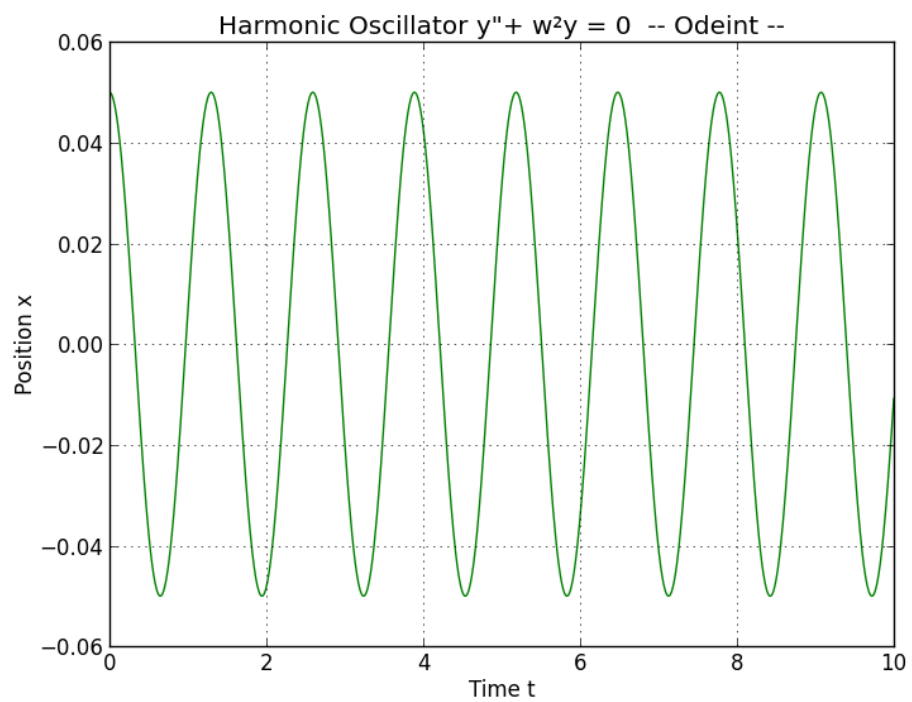


Fig A.1.2 – Odeint solution

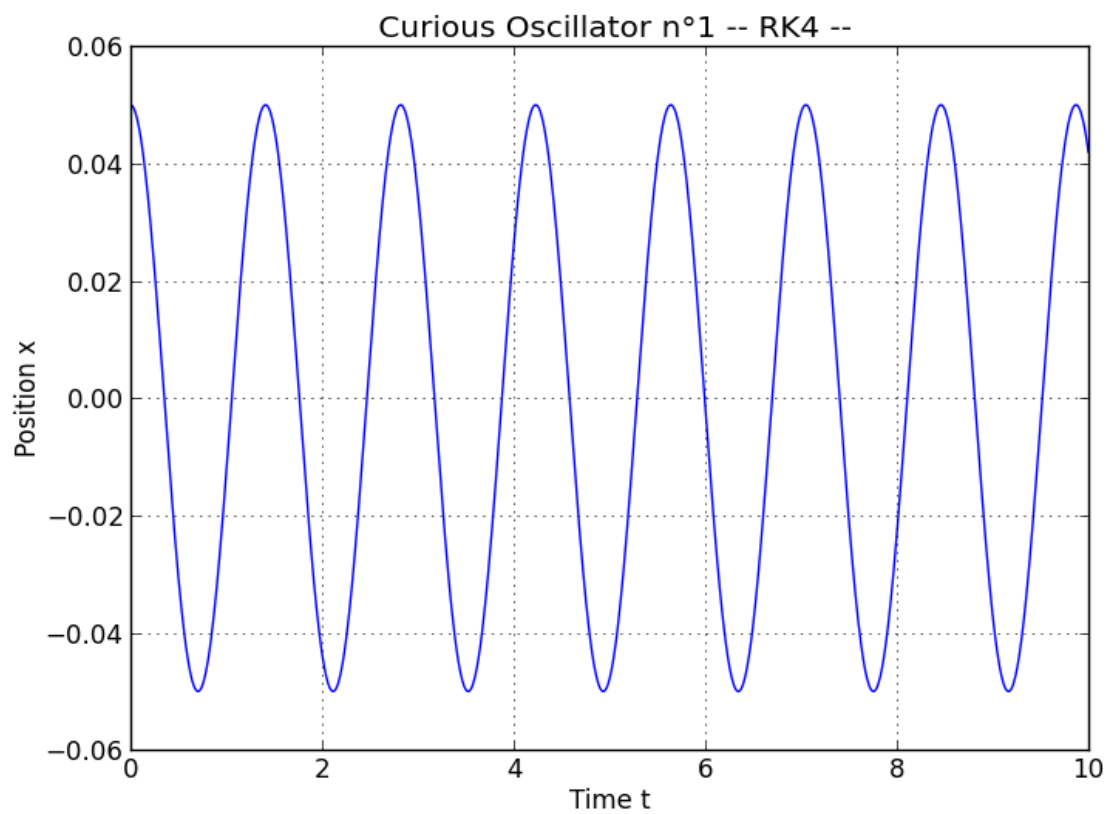


Fig A.1.3 – General solution

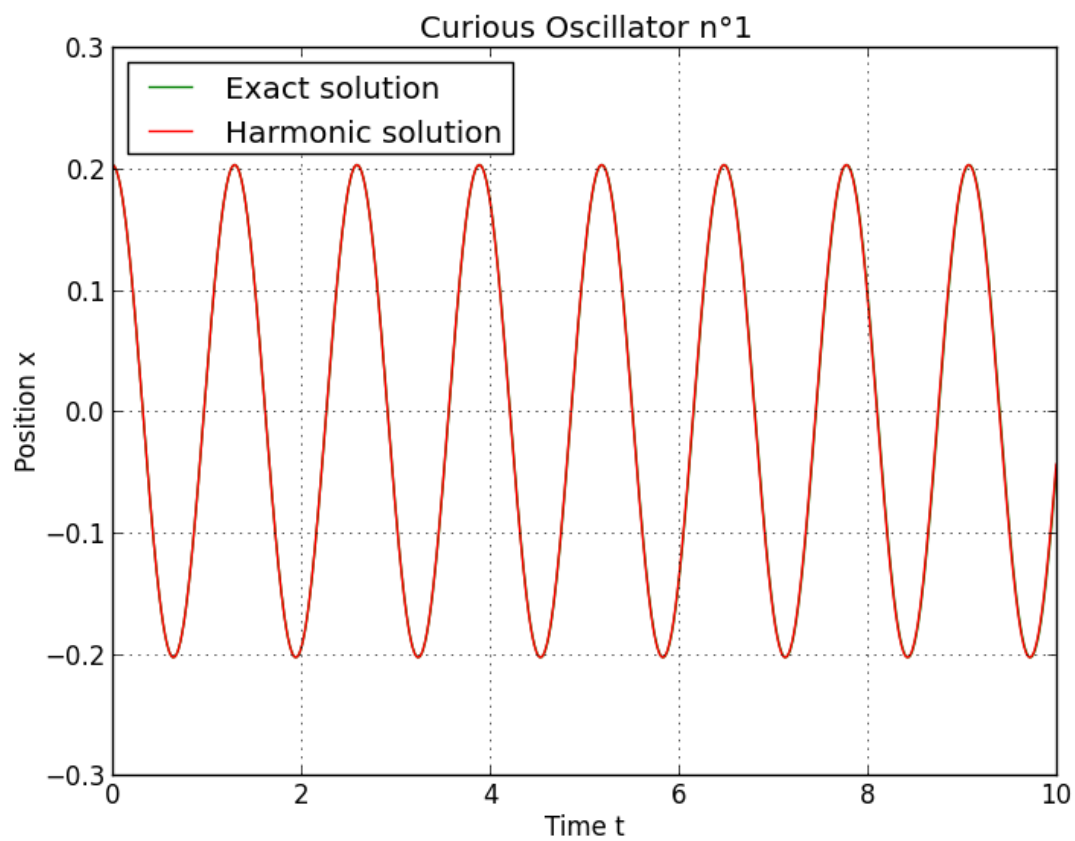


Fig A.1.4 – Comparison between general and harmonic solution

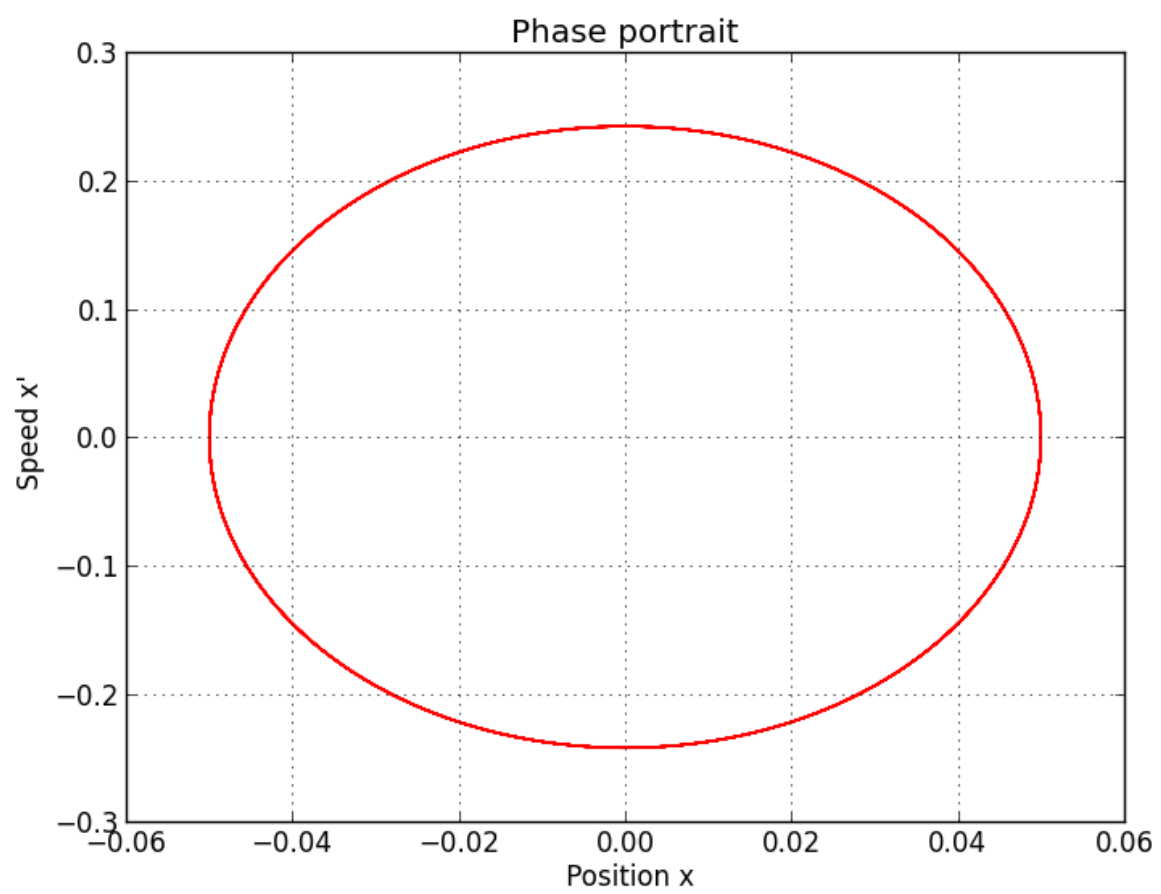


Fig A.1.5 – Phase portrait

A.2 Second oscillator

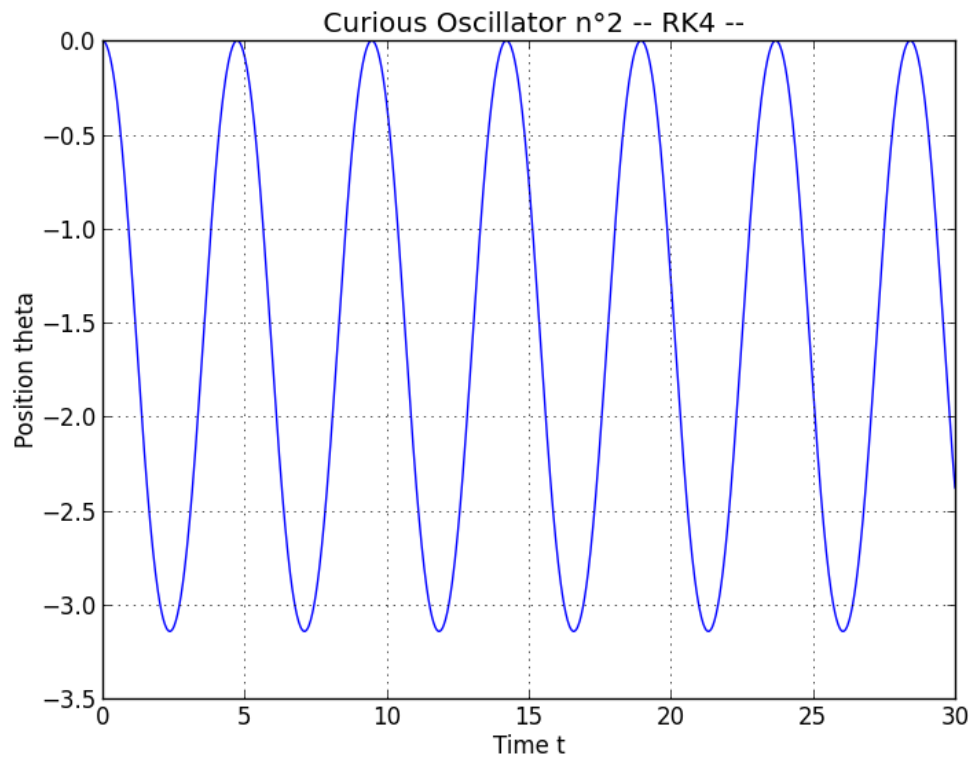


Fig A.2.1 – General solution

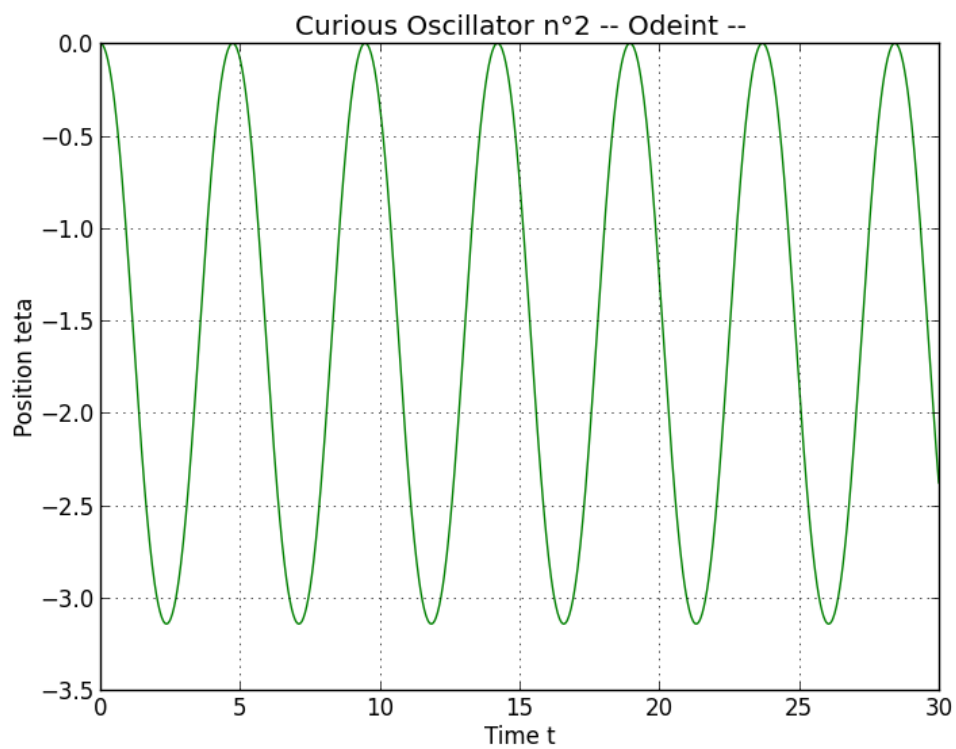


Fig A.2.2 –Odeint solution

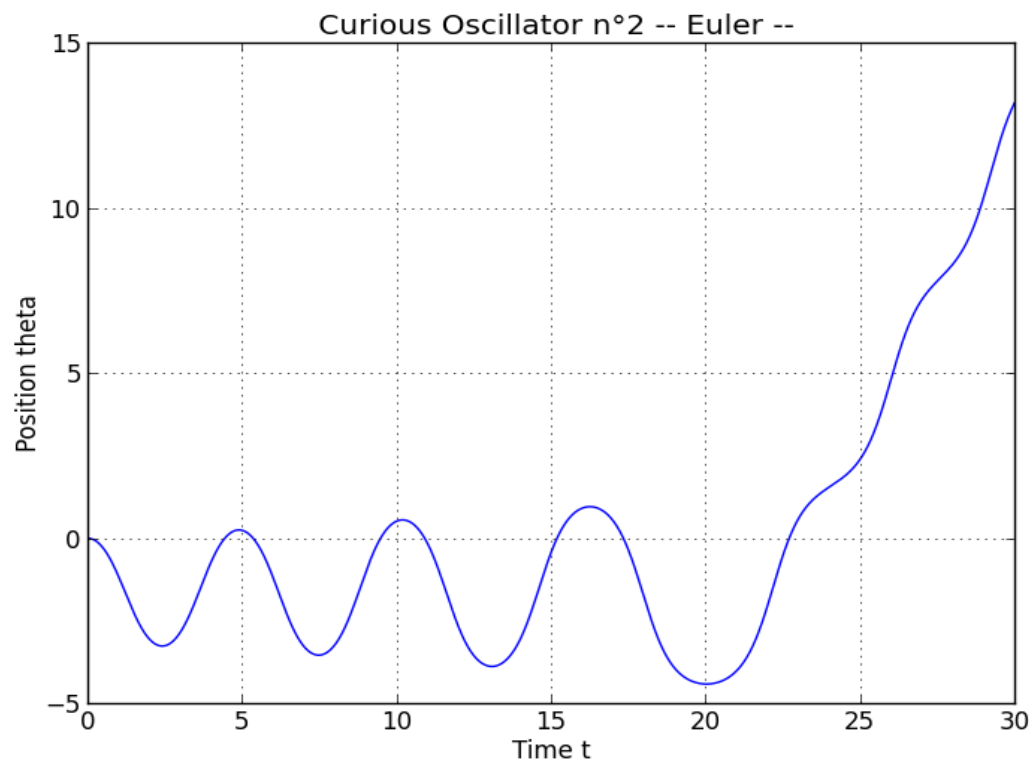


Fig A.2.3 – Euler solution

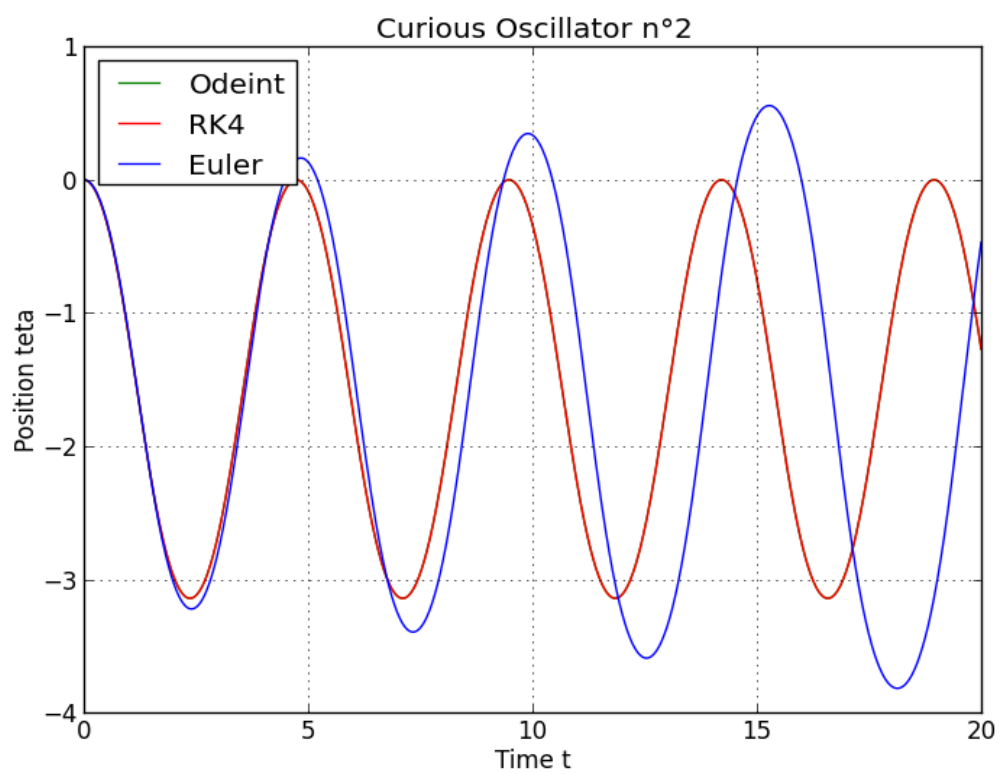


Fig A.2.4 – Comparison between all solutions

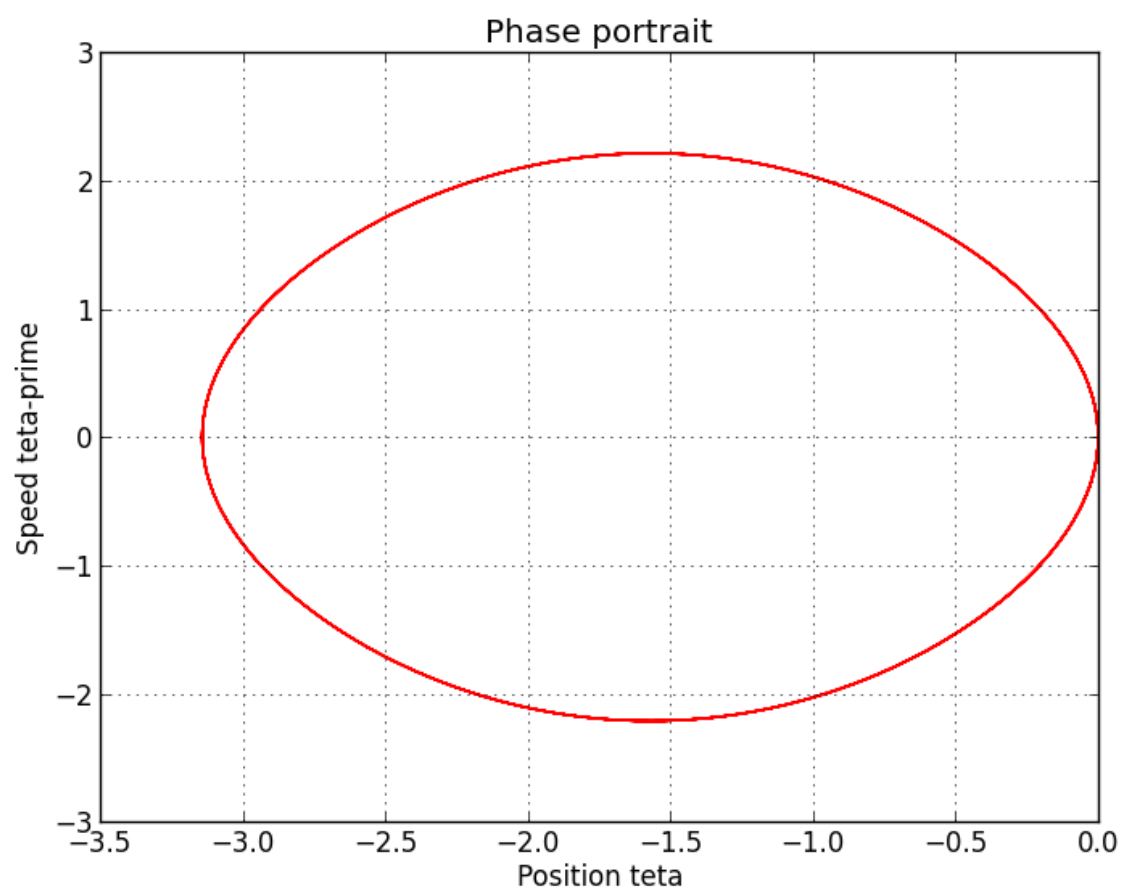


Fig A.2.5 – Phase portrait